No. 17-269	
Title:	**Washington, Petitioner** **v.** **United States, et al.**
Docketed:	August 21, 2017
Lower Ct:	United States Court of Appeals for the Ninth Circuit
Case Numbers:	(13-35474)
Decision Date:	March 2, 2017
Rehearing Denied:	May 19, 2017
Questions Presented	

DATE	PROCEEDINGS AND ORDERS
Aug 17 2017	Petition for a writ of certiorari filed. (Response due September 20, 2017)
Sep 15 2017	Order extending time to file response to petition to and including October 20, 2017, for all respondents.
Sep 20 2017	Brief amici curiae of Business Home Building, Real Estate, Farming and Municipal Organizations filed.
Sep 20 2017	Motion for leave to file amici brief filed by Modoc Point Irrigation District, et al.
Sep 20 2017	Brief amici curiae of State of Idaho, et al. filed.
Oct 12 2017	Order further extending time to file response to petition to and including November 27, 2017, for all respondents.
Nov 27 2017	Brief of respondent United States in opposition filed. **Proof of Service** **Main Document**
Nov 27 2017	Brief of respondents Suquamish Indian Tribe, et al. in opposition filed. **Main Document** **Other** **Certificate of Word Count** **Proof of Service**
Dec 11 2017	Reply of petitioner Washington filed. (Distributed) **Main Document** **Certificate of Word Count** **Proof of**

	Service **Other**
Dec 13 2017	DISTRIBUTED for Conference of 1/5/2018.
Jan 08 2018	DISTRIBUTED for Conference of 1/12/2018.
Jan 12 2018	Motion for leave to file amici brief filed by Modoc Point Irrigation District, et al. GRANTED.
Jan 12 2018	Petition GRANTED.
Jan 17 2018	Blanket Consent filed by Petitioner, Washington **Blanket Consent**
Feb 23 2018	SET FOR ARGUMENT on Wednesday, April 18, 2018.
Feb 24 2018	Brief of petitioner Washington filed. **Main Document** **Certificate of Word Count** **Proof of Service** **Other**
Feb 24 2018	Joint appendix (3 Volumes) filed. (Statement of costs filed) **Main Document** **Main Document** **Main Document** **Proof of Service**
Mar 02 2018	Brief amici curiae of States of Idaho, et al. filed. **Main Document** **Certificate of Word Count** **Proof of Service**
Mar 02 2018	Brief amicus curiae of Pacific Legal Foundation filed. **Main Document** **Certificate of Word Count** **Proof of Service**
Mar 02 2018	Brief amici curiae of Modoc Point Irrigation District, et al. filed. **Main Document** **Certificate of Word Count** **Proof of Service**
Mar 05 2018	Brief amici curiae of Business, Home Building, Real Estate, Farming and Municipal Organizations filed. (Distributed) **Main Document** **Certificate of Word Count** **Proof of Service**
Mar 05 2018	Brief amici curiae of Citizens Equal Rights Foundation, et al. filed. (Distributed) **Main Document** **Certificate of Word Count** **Proof of Service**
Mar 05 2018	Brief amici curiae of American Forest & Paper Association and National Mining Association filed. (Distributed) **Main Document** **Certificate of Word Count** **Proof of Service**
Mar 05 2018	Motion for leave to file amici brief filed by Washington State Association of

	Counties and Association of Washington Cities. (Distributed) **Main Document** **Proof of Service** **Certificate of Word Count**
Mar 07 2018	CIRCULATED
Mar 19 2018	Motion for leave to file amici brief filed by Washington State Association of Counties and Association of Washington Cities GRANTED.
Mar 23 2018	Letter from Clerk of Court to counsel of record noting that Justice Kennedy will not continue to participate in this case. **Main Document**
Mar 26 2018	Brief of respondent United States filed. (Distributed) **Main Document** **Proof of Service**
Mar 26 2018	Brief of Suquamish Indian Tribe, et al. submitted. **Main Document** **Certificate of Word Count** **Proof of Service**

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RECORD AND BRIEFS

Supreme Court, U.S.
FILED
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17-269

No. _____

In The
Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.

Respondents.

ON PETITION FOR WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

PETITION FOR WRIT OF CERTIORARI

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QUESTIONS PRESENTED

In a series of treaties, the federal government promised northwest Indian tribes "[t]he right of taking fish, at all usual and accustomed grounds and stations . . . in common with all citizens." This Court has held that this language guarantees the tribes "a fair share of the available fish," meaning fifty percent of each salmon run, revised downward "if tribal needs may be satisfied by a lesser amount." *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 685 (1979).

In this case, the Ninth Circuit held that the treaties instead guaranteed "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." App. 94a. On that basis, the panel held that the treaties require Washington to replace culverts under state roads that restrict salmon passage. The court ordered the State to replace hundreds of culverts, at a cost of several billion dollars, even though it is undisputed that: (1) the federal government—the lead Plaintiff—specified the design and granted permits for the overwhelming majority of culverts at issue; and (2) many culvert replacements will have no benefit for salmon because of other non-State owned barriers to salmon on the same streams.

The questions presented are:

1. Whether the treaty "right of taking fish, at all usual and accustomed grounds and stations . . . in common with all citizens" guaranteed "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes."

2. Whether the district court erred in dismissing the State's equitable defenses against the federal government where the federal government signed these treaties in the 1850's, for decades told the State to design culverts a particular way, and then filed suit in 2001 claiming that the culvert design it provided violated the treaties it signed.

3. Whether the district court's injunction violates federalism and comity principles by requiring Washington to replace hundreds of culverts, at a cost of several billion dollars, when many of the replacements will have no impact on salmon and Plaintiffs showed no clear connection between culvert replacement and tribal fisheries.

PARTIES

Petitioner is the State of Washington, which was the defendant at trial and appellant at the Ninth Circuit.

Respondents are the United States of America; Confederated Tribes and Bands of the Yakama Nation; Hoh Indian Tribe; Jamestown S'Klallam Tribe; Port Gamble S'Klallam Tribe; Lower Elwha Klallam Tribe; Lummi Nation; Makah Tribe; Muckleshoot Indian Tribe; Nisqually Indian Tribe; Nooksack Tribe; Puyallup Tribe; Quileute Indian Tribe; Quinault Indian Nation; Sauk-Suiattle Tribe; Skokomish Indian Tribe; Squaxin Island Tribe; Stillaguamish Tribe of Indians; Suquamish Indian Tribe; Swinomish Indian Tribal Community; Tulalip Tribes; and Upper Skagit Indian Tribe. Respondents were the plaintiffs at trial and the appellees at the Ninth Circuit.

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INTRODUCTION

The Ninth Circuit's opinion below adopts a treaty interpretation already rejected by this Court, conflicts with decisions of this Court and other circuits, and creates a massive new treaty obligation that will "significantly affect natural resource management throughout the Pacific Northwest." App. 41a. This Court should grant certiorari.

In 1854 and 1855, the federal government signed treaties with many northwest Indian tribes, protecting their "right of taking fish, at all usual and accustomed grounds and stations . . . in common with all citizens[.]" *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 674 & n.21 (1979) (*Fishing Vessel*). This Court has interpreted this language many times, and has held that it guarantees the signatory tribes three key rights: (1) access to traditional fishing places, *United States v. Winans*, 198 U.S. 371, 381-82 (1905); (2) freedom from some state fishing regulations, *Puyallup Tribe v. Dep't of Game of Washington*, 391 U.S. 392, 399 (1968); and (3) "a fair share of the available fish," up to 50% of each salmon run, *Fishing Vessel*, 443 U.S. at 685. Exercising these rights, western Washington tribes take roughly 1.5 million salmon annually. App. 183a-86a. And the State of Washington has spent hundreds of millions of dollars to preserve salmon for the benefit of tribes and all residents. App. 32; Ninth Circuit Excerpts of Record (ER) 136, 148, 739-40.

In 2001, the federal government and several tribes sued the State (a non-party to the treaties) claiming the treaties create an additional right never

recognized by this Court: to force Washington to replace culverts under state roads that restrict fish passage. The Ninth Circuit ruled in their favor. It interpreted *Fishing Vessel* to guarantee "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." App. 94a. And it concluded that state culverts impair this right. The Ninth Circuit denied rehearing en banc over the objection of nine judges. App. 1a-57a.

The panel's unworkable treaty interpretation conflicts with this Court's decision in *Fishing Vessel*. There, the Tribes argued that the treaties entitled them to enough fish to meet "their commercial and subsistence needs." *Fishing Vessel*, 443 U.S. at 670. The federal government disagreed, arguing "that the Indians were entitled either to a 50% share of the 'harvestable' fish that . . . passed through their fishing places, or to their needs, *whichever was less*." *Id.* (emphasis added) (footnote omitted). This Court "agree[d] with the Government." *Id.* at 685. Thus, as the en banc Ninth Circuit previously explained: "*Fishing Vessel* did not hold that the Tribes were entitled to any particular minimum allocation of fish." *United States v. Washington*, 759 F.2d 1353, 1359 (9th Cir. 1985) (en banc). The panel here nonetheless held that the treaties promised there would always be enough fish "to provide a 'moderate living' to the Tribes," App. 94a, "turn[ing] *Fishing Vessel* on its head," App. 24a.

The panel also rejected the State's equitable defenses, citing prior Ninth Circuit opinions holding that equitable defenses are unavailable when the federal government brings treaty claims on behalf of tribes. App. 96a-99a. That holding is contrary to this

Court's decision in *City of Sherrill v. Oneida Indian Nation of New York*, 544 U.S. 197 (2005), and Second Circuit cases applying that decision. And it was remarkably unfair here, where the federal government specified how the State should build culverts, granted permits for their construction, and then decades later sued the State, saying that those same culverts violated treaties the federal government entered 150 years earlier.

The sweeping injunction imposed here also conflicts with this Court's holdings on the proper scope of injunctive relief against States. "[T]he injunction requires [Washington] to replace or repair all 817 culverts located in the area covered by the Treaties without regard to whether replacement of a particular culvert actually will increase the available salmon habitat." App. 37a. A federal court ordering a state to spend money on projects that will make no difference flies in the face of federalism and comity principles.

Finally, this Court's review is necessary because this case is exceptionally important. Replacing culverts will cost Washington billions of dollars, but that is only the beginning of the problem. "[P]laintiffs could use the panel's decision to demand the removal of dams and attack a host of other practices," and these concerns "extend[] far beyond the State of Washington," because the same treaty language is found in treaties with tribes in Idaho, Montana, and Oregon. App. 28a-29a. The ruling thus creates an ill-defined "environmental servitude" across the entire Pacific Northwest, intruding deeply into States' fiscal and policy decisions. The Court should grant certiorari.

OPINIONS BELOW

The amended and final Ninth Circuit decision below is reported at 853 F.3d 946 (2017). App. 58a-126a. The order denying rehearing en banc is reported at 2017 WL 2193387 (May 19, 2017). App. 1a-57a. An opinion respecting denial of rehearing en banc by Judge O'Scannlain, and joined in full by judges Kozinski, Tallman, Callahan, Bea, Ikuta, and N.R. Smith, and joined as to all but part IV by judges Bybee and M. Smith, is found at App. 17a-41a. An opinion concurring in denial of review en banc by judges W. Fletcher and Gould is found at App. 6a-17a.

The district court's summary judgment ruling is reported at *United States v. Washington*, 20 F. Supp. 3d 828 (W.D. Wash. 2007). App. 249a-72a. The district court's injunctive rulings are reported at *United States v. Washington*, 20 F. Supp. 3d 986 (W.D. Wash. 2013). App. 127a-79a, 235a-42a. The district court's order striking the state's equitable defenses is reported at *United States v. Washington*, 19 F. Supp. 3d 1317 (W.D. Wash. 2001). App. 273a-82a. The district court's supplement to memorandum and decision and its order on motions in limine are unreported. App. 180a-234a; App. 243a-48a.

JURISDICTION

The order denying rehearing en banc was entered on May 19, 2017. App. 1a. This Court has jurisdiction under 28 U.S.C. § 1254(1).

STATUTES

The treaties at issue in this case provide, in substantively identical language:

> The said tribes and bands of Indians cede, relinquish, and convey to the United States, all their right, title, and interest in and to the lands and country occupied by them.

Each treaty also provides:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory . . . .

Treaty with the Nisqualli, Puyallup Etc. 1854 (Medicine Creek Treaty), arts. I, III, 10 Stat. 1132, 1133 (Dec. 26, 1854, ratified Mar. 3, 1855, proclaimed Apr. 10, 1855).[1]

STATEMENT OF THE CASE

A. Historical Treaty Negotiations and Salmon Runs

In 1854 and 1855, the United States negotiated eleven treaties with Indian tribes in what are now the states of Idaho, Montana, Oregon, and Washington. *See generally Seufert Bros. Co. v. United States*, 249 U.S. 194, 196-97 (1919). In the treaties, the tribes

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[1] *See also* Treaty with the Dwámish Etc. Indians (Point Elliott Treaty), arts. I, V, 12 Stat. 927, 928 (Jan. 22, 1855, ratified Mar. 8, 1859, proclaimed Apr. 11, 1859); Treaty with the S'Klallam (Point No Point Treaty), arts. I, IV, 12 Stat. 933, 934 (Jan. 26, 1855, ratified Mar. 8, 1859, proclaimed Apr. 29, 1859); Treaty with the Makah, arts. I, IV, 12 Stat. 939, 940 (Jan. 31, 1855, ratified Mar. 8, 1859, proclaimed Apr. 18, 1859); Treaty with the Yakama, arts. I, III, 12 Stat. 951, 953 (June 9, 1855, ratified Mar. 8, 1859, proclaimed Apr. 18, 1859); Treaty with the Qui-nai-elt, Etc. (Olympia Treaty), arts. I, III, 12 Stat. 971, 972 (Jan. 25, 1856, ratified Mar. 8, 1859, proclaimed Apr. 11, 1859).

ceded to the United States "all their right, title, and interest" in the lands they occupied while reserving their right to continue fishing at traditional locations:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory . . . .

Medicine Creek Treaty, art. III, 10 Stat. at 1133.[2] At the time, there were roughly 7,500 Indians in western Washington, the area covered by the treaty claims at issue in this case. *Fishing Vessel*, 443 U.S. at 664.

Salmon are anadromous fish, meaning they hatch in fresh water rivers and streams, "migrate to the ocean where they are reared and reach mature size, and eventually complete their life cycle by returning to the fresh-water place of their origin to spawn." *Id.* at 662. "At the time the treaties were executed there was a great abundance of fish and a relative scarcity of people." *Id.* at 675. Salmon runs were "considered inexhaustible[.]" *United States v. Washington*, 157 F.3d 630, 640 (9th Cir. 1998). Thus, as the trial court found: "It was not deemed necessary to write any protection for the [salmon] into the treat[ies] because nothing in any of the parties'

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[2] Language in the other treaties is similar. *See supra* note 1; Treaty with the Walla-Walla, Etc., art. I, 12 Stat. 945, 946 (June 9, 1855, ratified Mar. 8, 1859, proclaimed Apr. 11, 1859); Treaty with the Nez Percés, art. III, 12 Stat. 957, 958 (June 11, 1855, ratified Mar. 8, 1859, proclaimed Apr. 29, 1859); Treaty with the Tribes of Middle Oregon, art. I, 12 Stat. 963, 964 (June 25, 1855, ratified Mar. 8, 1859, proclaimed Apr. 18, 1859); Treaty with the Flatheads, Etc., art. III, 12 Stat. 975, 976 (July 16, 1855, ratified Mar. 8, 1859, proclaimed Apr. 18, 1859).

experience gave them reason to believe that would be necessary." App. 269.

Unfortunately, overharvesting by non-Indians showed that salmon were, in fact, an exhaustible resource. By the early 1900's—long before the State built any highways—salmon runs in western Washington had declined precipitously. App. 70a. Scarcity led to litigation over the meaning of the treaty right.[3]

B. This Court's Decisions Interpreting the Treaty Right

The first case to reach this Court was *United States v. Winans*, 198 U.S. 371 (1905). In the 1890s, non-Indian landowners fenced off a trail to a traditional Indian fishing place on the Columbia River in Washington and erected large fish wheels, excluding the Indians from that fishing site. The United States sued to enjoin the landowners from interfering with the Indians' treaty rights. This Court held that the landowners could not exclude the Indians from traditional fishing places. *Id.* at 381. "[T]he Indians were given a right in the land—the right of crossing it to the river—the right to occupy it" for fishing purposes. *Id.*; *see also Seufert Brothers Co.*, 249 U.S. at 199 (same holding as to land in Oregon).

This Court next addressed whether the treaties preempted state fishing regulation. In *Tulee v. Washington*, 315 U.S. 681 (1942), this Court held that the Yakama Treaty preempted a state license fee as

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[3] *See generally* Fronda Woods, *Who's In Charge of Fishing?*, 106 Or. Hist. Q. 412 (2005), https://www.fws.gov/leavenworthfisheriescomplex/who_in_charge_fishing%20(1).pdf.

applied to a Yakama Indian fishing at a traditional place. The Court held that "such exaction of fees as a prerequisite to the enjoyment of fishing in the 'usual and accustomed places' cannot be reconciled with a fair construction of the treaty." *Tulee*, 315 U.S. at 685. The Court added that "the treaty leaves the state with power to impose on Indians equally with others such restrictions of a purely regulatory nature concerning the time and manner of fishing outside the reservation as are necessary for the conservation of fish[.]" *Id.* at 684.

That dictum became a holding in *Puyallup Tribe v. Department of Game of Washington*, 391 U.S. 392, 399 (1968), where the Court held that the Medicine Creek Treaty did not preempt state police power "expressed in nondiscriminatory measures for conserving fish resources." When the *Puyallup* case reached the Court again after remand, this Court held that state regulations that barred Indians from using traditional fishing nets were discriminatory, and therefore preempted, because they effectively allocated the entire steelhead catch to non-Indians. *Dep't of Game of Washington v. Puyallup Tribe*, 414 U.S. 44 (1973). The Court remanded so that the available fish could be "fairly apportioned between Indian net fishing and non-Indian sports fishing." *Id.* at 48, 49. When the *Puyallup* case reached this Court a third time, this Court upheld an allocation of "45% of the annual natural steelhead run available for taking to the treaty fishermen's net fishery." *Puyallup Tribe, Inc. v. Dep't of Game of Washington*, 433 U.S. 165, 177 (1977).

In 1970, while the *Puyallup* litigation was pending, the United States and a number of tribes initiated this case by suing the State of Washington in federal court. The United States alleged that the right of taking fish entitled the Tribes to a fair share of the salmon passing their traditional fishing places. *Fishing Vessel*, 443 U.S. at 670. The Tribes, however, contended that the treaties entitled them "to as many fish as their commercial and subsistence needs dictated." *Id.* The district court agreed with the United States and held that the treaty right, being "in common with" other people, entitles the Tribes to a fair share of available fish. *United States v. Washington*, 384 F. Supp. 312, 401 (W.D. Wash. 1974), *aff'd*, 520 F.2d 676 (9th Cir. 1975), *cert. denied*, 423 U.S. 1086 (1976). In devising an equitable remedy to implement the Tribes' right to a fair share of the harvests, the court set the tribal share at 50%. *Id.* at 343-44, 416.

After the Washington Supreme Court issued rulings conflicting with the district court's orders, this Court consolidated several cases and granted review. *See Fishing Vessel*, 443 U.S. at 669-74. This Court generally affirmed the district court's approach, holding that the right of taking fish "in common" means "[b]oth sides have a right, secured by treaty, to take a fair share of the available fish." *Id.* at 684-85. Agreeing with the United States, the Court said equal shares were "equitable," but recognized that, like any equitable remedy, the injunction could be modified for changed circumstances. For example, if in the future a tribe did not need 50% of the available fish for a "livelihood," or "moderate living," that allocation

might be unreasonable, and the State could ask for a downward adjustment. *Fishing Vessel*, 443 U.S. at 685-87.

After this Court's remand 38 years ago, the case never ended. Instead, the district court kept the case open and created a process for filing "sub-proceedings," dozens of which have since been filed, many of them intertribal disputes. *See generally United States v. Washington*, 573 F.3d 701, 704-05, 709-10 (9th Cir. 2009) (describing this process and one particular intertribal dispute). Thus, "[j]udges in the Western District of Washington have now been regulating fishing in the Puget Sound for 35 years, with the aid of a Fishery Advisory Board that the court created," and "the court has become a regulatory agency perpetually to manage fishing." *Id.* at 709.

C. Facts and Proceedings in this Case

In 2001, the federal government and 21 tribes filed a new "sub-proceeding" in *United States v. Washington*. They alleged that the treaties promised the Tribes they would always be able to earn a "moderate living" from fishing and that culverts under state roads that impede fish passage violate this promise. App. 250a; ER 1002-15. They sought declaratory and injunctive relief against the State. ER 1002-15.

1. Culverts in Washington

Culverts are engineered structures that allow streams to pass under roads, and they can range from simple pipes to "stream-simulation" designs that mimic natural stream conditions. App. 77a, 209a-13a, 221a-26a (examples of culverts). Culverts are often

necessary in Washington because of the abundance of streams, and their costs vary widely depending on culvert type, stream conditions, and highway size and location.

Washington began building culverts in meaningful numbers when it accepted Congress's invitation to participate in the federal-aid highway program roughly a century ago. *See* Act of July 11, 1916, ch. 241, 39 Stat. 355; 1917 Wash. Sess. Laws, page no. 260 (codified as amended Wash. Rev. Code § 47.04.050). Congress created a partnership where the federal government provides partial funding for highways and states construct them to federal design standards under federal oversight. *E.g.*, Pub. L. No. 85-767, § 106, 72 Stat. 885, 892 (1958) (codified as amended at 23 U.S.C. § 106); Act of July 11, 1916, ch. 241, § 6, 39 Stat. at 357-58. *See generally* David R. Levin, *Federal Aspects of the Interstate Highway Program*, 38 Neb. L. Rev. 377 (1959); Richard F. Weingraff, Federal Highway Administration, *100th Anniversary–An Evolving Partnership*, 78 Public Roads No. 4 (2014). Today, all Washington state highways are federal-aid highways as described in 23 U.S.C. § 103. *See* Wash. Rev. Code § 47.17.001.

Federal law has long treated culverts as integral parts of the highways covered by federal-aid laws. Act of July 11, 1916, ch. 241, § 2, 39 Stat. at 356 ("culverts shall be deemed parts of the respective roads covered by the provisions of this Act"). The federal government specified designs for highway culverts and distributed culvert engineering guidance to state highway departments. Levin, 38 Neb. L. Rev. at 393-96; ER 664. The Army Corps of Engineers also issued nationwide permits specifying conditions

under which road culverts are approved under Section 404 of the Clean Water Act without further processing. *See* 33 C.F.R. §§ 323.4, 323.4-3(a)(3) (1978). The Corps issued individual permits for many other culverts under 33 C.F.R. § 323.4-4 (1978).

Washington relied on the federal design standards, guidance, and permit conditions in building its culverts. ER 664, 989-90, 1082. Until the mid-1990s, virtually all state highway culverts in Washington were built to federally-supplied design standards. ER 665. At no time did the federal government notify the State that it would be violating treaty rights by using federal culvert designs or complying with federal permits. ER 665; App. 96a-97a.

By 1968, Washington had completed nearly all of its approximately 7000-mile state highway system. ER 312. But the State has continued to modify, expand, and update highways, and builds culverts in doing so.

In the 1990s, state scientists concluded that federal culvert designs were often inadequate to pass fish because they increased water velocity or turbidity, could become blocked by debris, or for other reasons. The State began identifying fish-barrier culverts under state highways and replacing them. App. 141a, 147a, 153a, 195a; ER 837. Washington became a national leader in developing new culvert designs that better pass fish and received awards from the federal government for its leadership in addressing fish passage. App. 137a, 144a; ER 117, 675-76, 840, 879-83.

Since 1991, Washington has spent over $135 million to remove barrier culverts in the state highway system.[4] This is in addition to the cost of culverts replaced as part of larger highway projects or in other state roads. App. 149a-52a, 169a. The State has also spent hundreds of millions of dollars on other salmon recovery efforts. *See* App. 155a-56a; ER 148-49, 659.

State-owned culverts are a small fraction of the barrier culverts in Washington. App. 203a. Federal, tribal, and local governments, as well as private landowners, have also built roads that include barrier culverts. Such culverts are ubiquitous in Washington, and the total number is unknown. ER 593, 1030, 1045. There is no exhaustive inventory of non-state culverts, but non-state barrier culverts outnumber state barrier culverts by at least 3 to 1, and in some watersheds by as much as 36 to 1. App 203a; ER 196-209, 407-555. Because there are so many non-state culverts, the State has focused its highway culvert replacement efforts on streams with no other barriers, where replacing the state barrier may actually open access to habitat. ER 630-31, 671.

2. District Court Proceedings

Despite its role in designing and permitting culverts under Washington highways, in 2001 the federal government joined 21 tribes in initiating this "sub-proceeding," claiming that the State's culverts

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[4] Wash. State Dep't of Transp., *WSDOT Fish Passage Performance Report*, Table 2 (June 30, 2017), http://www.wsdot.wa.gov/publications/fulltext/projects/FishPassage/2017FishPassageAnnualReport.pdf.

violate the federal treaties signed in 1854-1855. The State denied that the treaties imposed the alleged duty and asserted that the United States and the tribes were barred by equitable principles from seeking relief related to culverts designed to federal standards or installed under federal permits. ER 989-90, 995-96. The trial court granted the United States' motion to strike those defenses, ruling that the State could not use them to defeat the United States' action to enforce tribal treaty rights. App. 274a-75a.

In 2006, the parties cross-moved for summary judgment on whether the treaty imposed the duty alleged. The trial court granted the tribes' motion and denied the State's. App. 249a-72a. The court found that "fish harvests have been substantially diminished" since 1985, and drew a "logical inference that a significant portion of this diminishment is due to the blocked culverts[.]" App. 254a, 263a. The court acknowledged that nothing in the treaties' text prohibited state actions that incidentally impacted salmon runs: "[i]t was not deemed necessary to write any protection for the resource into the treaty because nothing in any of the parties' experience gave them reason to believe that would be necessary." App. 269a. But the court concluded that statements made by the United States' treaty negotiators at some of the 1854-1855 treaty councils "carried the implied promise that neither the negotiators nor their successors would take actions that would significantly degrade the resource," and found that "the building of stream-blocking culverts" is a "resource-degrading activity." App. 270a. The court declared:

> [T]he right of taking fish, secured to the Tribes in the Stevens Treaties, imposes a duty upon the State to refrain from building or operating culverts under State-maintained roads that hinder fish passage and thereby diminish the number of fish that would otherwise be available for Tribal harvest. The Court further declares that the State of Washington currently owns and operates culverts that violate this duty.

App. 271a.

The court held a trial on the proper remedy in 2009. App. 128a. The court granted the State's motion in limine to exclude as "too speculative" the tribes' estimates of how many salmon were "lost" because of state-owned culverts. App. 245a-47a. The court also directed the parties to submit proposed Findings of Fact and Conclusions of Law. The State argued that the plaintiffs had not demonstrated entitlement to an injunction, in part because there was no evidence of any connection between state culverts and the amount of salmon available to any particular tribe's fisheries, or any evidence that an injunction would increase any tribe's salmon catch. The State asked the court to let the state's culvert-removal program remain in place as part of a multi-faceted regional salmon recovery strategy.

In 2013, the court adopted without change an injunction submitted by the United States and the Tribes, ordering the State to replace any state-owned barrier culvert that "has 200 lineal meters or more of salmon habitat upstream to the first *natural* passage barrier," regardless of any man-made barriers

surrounding the state culvert. App. 237a (emphasis added). Thus, the State must replace its culverts even if non-state barriers upstream and/or downstream from the state culvert prevent salmon from reaching it. App. 37a.

3. Ninth Circuit Proceedings

A panel of the Ninth Circuit affirmed. App. 58a-126a. The panel found a treaty right to demand culvert removal based not on the treaty language itself, but rather on statements made by Isaac Stevens, the United States' lead treaty negotiator, to the effect that he wanted the treaties to secure the Tribes' access to food forever. App. 91a. Based on these statements, the panel found a promise that the federal government would ensure "that there would be fish sufficient to sustain" the Tribes. App. 92a. The panel also said that even if Stevens had not made these statements, it would simply "infer a promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." App. 94a.

Finding that "[s]almon now available for harvest are not sufficient to provide a 'moderate living' to the Tribes," and that "several hundred thousand additional mature salmon would be produced every year" if the State's blocking culverts were replaced—findings not made by the district court—the panel concluded that "Washington has violated, and is continuing to violate, its obligation to the Tribes under the Treaties" by "act[ing] affirmatively to build and maintain barrier culverts under its roads." App. 95a-96a.

The panel also affirmed the district court's ruling that equitable defenses were unavailable, holding that this Court's decision in *City of Sherrill* was inapplicable. App. 96a-99a.

Finally, the panel affirmed the district court's injunction, holding that it was not overbroad or inequitable because the State recognized before the case was filed that replacing some culverts was a good idea. App. 104a-23a. The panel added that "an injunction enforcing Indian treaty rights should not be viewed in the same light" as an injunction to enforce other federal laws or constitutional rights, and may broadly intrude into state affairs. App. 123a-25a.

4. En Banc Proceedings

The State petitioned for rehearing en banc, which the Ninth Circuit denied. App. 6a. Judge O'Scannlain, joined by eight judges as to all but part IV, and by six judges as to part IV, filed an opinion respecting the denial of rehearing en banc. App. 17a-41a.

Describing the panel opinion as a "runaway decision" that had "discovered a heretofore unknown duty" in the treaties, the nine dissenting judges urged that the panel opinion made "four critical errors." App. 17a-19a.

First, the panel misread *Fishing Vessel* as holding that the treaties guarantee the Tribes enough salmon for a "moderate living." *Fishing Vessel* held only that the treaties secure to the Tribes a fair share of available fish, up to 50%, not a guaranteed quantity. App. 21a-26a.

Second, the dissenters noted the absence of evidence connecting state culverts with tribal fisheries. App. 27a-29a. They pointed out that the panel's "overly broad reasoning" turns any activity that affects fish habitat into a treaty violation, and turns the federal courts into environmental policymakers. App. 28a-32a.

Third, in Part IV, the dissenting judges urged that the panel opinion defied this Court's decision in *City of Sherrill*, and suggested that an equitable doctrine such as laches could bar relief because of the United States' involvement in designing the culverts and its long acquiescence in their existence. App. 32a-36a.

Finally, the dissent explained that the injunction was overbroad because it requires the State to spend large sums on culvert removals that will have no impact on salmon. App. 36a-41a.

REASONS THE PETITION SHOULD BE GRANTED

A. The Ninth Circuit's Decision Conflicts with this Court's Decisions About How to Interpret these Treaties and How to Interpret Treaties Generally

Petitions for certiorari often claim that a lower court "has decided an important federal question in a way that conflicts with relevant decisions of this Court." Rule 10(c). But this case presents a uniquely troubling example of such a conflict: the panel's decision interprets a federal treaty in a way that rejects this Court's prior reading of the exact same language in this very case. The panel opinion also

conflicts more generally with this Court's holdings on treaty interpretation. Both conflicts warrant certiorari.

1. The Ninth Circuit's Decision Conflicts with This Court's Decision in *Fishing Vessel*

The Ninth Circuit held that these treaties "promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." App. 94a. The panel claimed that *Fishing Vessel* supports this conclusion. App. 92a; *see* App. 7a-9a. In truth, *Fishing Vessel* rejected this unworkable standard. This Court should grant certiorari to resolve this conflict.

In *Fishing Vessel*, the parties advanced competing positions. The Tribes "contended that the treaties had reserved a pre-existing right to as many fish as their commercial and subsistence needs dictated." *Fishing Vessel*, 443 U.S. at 670. "The United States argued that the Indians were entitled either to a 50% share of the 'harvestable' fish that . . . passed through their fishing places, or to their needs, *whichever was less*." *Id.* (emphasis added) (footnote omitted). The State argued for a lesser tribal share. *Id.*

This Court "agree[d] with the Government," *id.* at 685, holding that the treaties "secure the Indians' right to take a share of each run of fish that passes through tribal fishing areas," *id.* at 679. The Court affirmed the district court's equitable allocation setting that share at 50%, but held that the share could be reduced in the future if a lesser share were sufficient to "provide the Indians with a livelihood—

that is to say, a moderate living." *Fishing Vessel*, 443 U.S. at 686. Thus, "the 50% figure imposes a maximum but not a minimum allocation." *Id.*

Fishing Vessel thus made clear that the "moderate living" standard is an equitable limit the State could invoke in the future as a ceiling on the tribal share of the catch, not a floor on fish harvests that the treaties always guaranteed. Indeed, the Ninth Circuit repeatedly described *Fishing Vessel* this way, until this panel's opinion. *See, e.g.*, *United States v. Washington*, 759 F.2d 1353, 1359 (9th Cir. 1985) (en banc) ("*Fishing Vessel* did not hold that the Tribes were entitled to any particular minimum allocation of fish. Instead, *Fishing Vessel* mandates an allocation of 50 percent of the fish to the Indians, subject to downward revision if moderate living needs can be met with less."); *Skokomish Indian Tribe v. United States*, 410 F.3d 506, 513 (9th Cir. 2005) (en banc) (describing *Fishing Vessel* as holding that the tribes were "entitled to an equal measure of the harvestable portion of each run . . . adjusted downward if tribal needs could be satisfied by a lesser amount"), *cert. denied*, 546 U.S. 1090 (2006); *Midwater Trawlers Co-operative v. Dep't of Commerce*, 282 F.3d 710, 719 (9th Cir. 2002) (same); *see also* App. 21a-25a.

Fishing Vessel is therefore irreconcilable with the panel's opinion. If, as the panel held, the treaties "promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes," App. 94a, this Court would have had to accept the Tribes' position in *Fishing Vessel* that they were entitled to as many fish as their "needs dictated." *Fishing Vessel*, 443 U.S. at 670. Instead, the Court

held that the Tribes were entitled to at most one-half of each run, even if that amount was less than their "needs dictated." *Fishing Vessel*, 443 U.S. at 686 ("[T]he 50% figure imposes a maximum but not a minimum allocation."). It cannot be the case that the treaties promised the Tribes both a "moderate living" from fishing and a "maximum" of 50% of each run; one opinion has to give, and in our system, it is the lower courts that are supposed to follow this Court's holdings. App. 24a ("[T]he panel opinion turns *Fishing Vessel* on its head.").

The panel's opinion is not only irreconcilable with precedent, it is also unworkable. The panel's opinion would mean that the State's ability to comply with the treaty would depend on a range of factors over which the State has no control, from natural fluctuations in salmon runs to salmon prices to what other income tribal members earn. It also leaves fundamental questions about the treaties' meaning unanswered, including whether the new "moderate living" guarantee grows with the Indian population in western Washington (which was roughly 7,500 at treaty time but is much larger today) and whether it grows as overall standards of living change.

The Court should grant certiorari to resolve the important conflict between its own reading of these treaties in *Fishing Vessel* and the panel's contrary reading. Resolving that conflict will determine whether the panel's basis for compelling billions in spending on culvert repairs is justified. Addressing this conflict would also allow the Court to examine if there is any treaty-based right to compel the State to restore salmon habitat to increase salmon returns. While the State does not believe the treaties contain

any such right (nor that it is necessary to read one in, given the State's own strong incentives to preserve salmon runs and the federal government's vast powers to adopt laws regulating and funding habitat protection and restoration), the State proposed to the Ninth Circuit a number of narrower possible rules it could consider instead of the unsupportable "moderate living" standard. *See, e.g.*, Dkt. 25 at 34-35, Dkt. 118 at 10-11; *see also, e.g.*, *United States v. Washington*, 694 F.2d 1374, 1377 n.7 (9th Cir. 1982) ("environmental degradation that has a discriminatory effect on Indians is barred under *Puyallup I* if authorized or caused by the State"), *vacated*, 759 F.2d 1353 (9th Cir. 1985). Granting certiorari would allow this Court to consider these alternatives itself while making clear that the extreme rule adopted by the panel is irreconcilable with this Court's precedent.

2. The Panel's Holding Conflicts with this Court's Holdings on Treaty Interpretation

Even setting aside the direct conflict with *Fishing Vessel*, the panel's opinion conflicts with this Court's holdings about treaty interpretation. By inferring a massive commitment nowhere mentioned in the treaties, never contemplated by the parties, and never recognized by the parties during the decades after the treaties, the panel ignored this Court's direction.

This Court has held that Indian treaties "cannot be re-written or expanded beyond their clear terms to remedy a claimed injustice or to achieve the asserted understanding of the parties." *Choctaw*

Nation of Indians v. United States, 318 U.S. 423, 432 (1943). On this basis, this Court has repeatedly rejected treaty interpretations never agreed to by the parties. *See, e.g.*, *Oklahoma Tax Comm'n v. Chickasaw Nation*, 515 U.S. 450, 466-67 (1995); *Oregon Dep't of Fish & Wildlife v. Klamath Indian Tribe*, 473 U.S. 753, 769-74 (1985).

Here, in declaring this massive new right and obligation, the panel never explained how the treaty "right of taking fish . . . in common with all citizens," could equate to a guarantee that "the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." And the panel entirely ignored the treaty agreement that the Tribes would "cede, relinquish, and convey to the United States, all their right, title, and interest in and to the lands and country occupied by them." *E.g.*, Medicine Creek Treaty, art. I, 10 Stat. at 1132. The panel made no attempt to reconcile this language with the import of its holding: that the Tribes silently retained a right to control land use decisions and State policies in the ceded territory that could affect salmon.

The panel instead looked to reported statements of treaty negotiators and the alleged implications of those statements. It is true that when construing ambiguous treaty language, courts can look "to the larger context that frames the Treaty, including 'the history of the treaty, the negotiations, and the practical construction adopted by the parties.'" *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 196 (1999). But even looking to those materials here cannot justify the panel's conclusion. As the dissent from the denial of rehearing pointed out, this Court considered the exact same

statements by negotiators in *Fishing Vessel* but still rejected the Tribes' position that the treaties promised as many fish as their "needs dictated." *Fishing Vessel*, 443 U.S. at 670. App. 25a. And the district court here reaffirmed that the parties did not intend "to write any protection for the resource into the treaty because nothing in any of the parties' experience gave them reason to believe that would be necessary." App. 269a.

The "practical construction adopted by the parties" also contradicts the panel's holding that State culverts violate the treaties if they incidentally restrict fish passage. *Mille Lacs Band*, 526 U.S. at 196. The federal government funded and provided designs for these culverts, until the State itself improved the designs. The Tribes agreed in the treaties that roads could be built. *E.g.*, Medicine Creek Treaty, art. II, 10 Stat. at 1133. And for over a century after signing the treaties, the federal government built dams that restricted or entirely blocked fish passage. *See, e.g.*, *Idaho ex rel. Evans v. Oregon*, 462 U.S. 1017, 1020-21 & nn. 2-5 (1983). Clearly, the federal government did not understand the treaties to prohibit such projects.

Finally, the panel's alternative theory for inferring this treaty right, based on cases finding implied water rights in treaties, is also inconsistent with this Court's precedent. *See* App. 92a-94a (citing *Winters v. United States*, 207 U.S. 564 (1908)). This Court considered these same cases in *Fishing Vessel*, 443 U.S. at 685-86, but still declined to adopt the Tribes' position. More broadly, these cases rely on the idea that when the United States created Indian reservations, it must have intended to reserve water sufficient to make the reservations viable. *See, e.g.*,

Cappaert v. United States, 426 U.S. 128, 139 (1976). Here, there is no need or basis to infer such a right because: (1) the State already has strong incentives to preserve salmon runs because it shares the runs equally with the Tribes; and (2) the federal government has broad power to protect salmon without adding a new right to this treaty, whether through laws, regulations, or funding decisions. As the dissenting judges observed, if lower courts "read these cases broadly to mean that we *can and should* infer a whole host of rights not contained in the four corners of tribal treaties, the possibilities are endless" for creating new rights. App. 26a.

In short, the panel's holding that the treaties implicitly guaranteed a moderate living from fishing was an effort "to remedy a claimed injustice," *Choctaw Nation*, 318 U.S. at 432, not a plausible interpretation of the treaty language or the parties' intent. This Court should grant certiorari to rectify the conflict between the Ninth Circuit's approach and this Court's directions on treaty interpretation.

B. The Ninth Circuit's Decision Conflicts with Decisions of this Court and the Second Circuit on the Availability of Equitable Defenses to Treaty Claims

The Ninth Circuit opinion also warrants review because it conflicts with decisions of this Court and the Second Circuit concerning equitable defenses.

In *City of Sherrill v. Oneida Indian Nation of New York*, 544 U.S. 197 (2005), a tribe purchased land within the boundaries of its historic reservation that had been held by non-Indians (and thus subject to state and local taxation) for many decades. This Court

held that equitable doctrines such as laches defeated the tribe's attempt to enjoin the city from imposing property taxes on the newly reacquired land. *See also Nebraska v. Parker*, 136 S. Ct. 1072, 1082 (2016) (agreeing with intervenor United States that disputed lands were within tribe's treaty reservation, but "express[ing] no view about whether equitable considerations of laches and acquiescence may curtail the Tribe's power to tax [non-Indian businesses]").

The Second Circuit applied *City of Sherrill* to hold that laches barred all remedies for disruptive treaty-based Indian land claims brought by tribes and by the United States on their behalf. *Oneida Indian Nation of New York v. Cty. of Oneida*, 617 F.3d 114 (2d Cir. 2010), *cert. denied*, 565 U.S. 970 (2011); *Cayuga Indian Nation of New York v. Pataki*, 413 F.3d 266 (2d Cir. 2005), *cert. denied*, 547 U.S. 1128 (2006); *see Stockbridge-Munsee Cmty. v. New York*, 756 F.3d 163, 165 (2d Cir. 2014) ("it is now well-established that Indian land claims asserted generations after an alleged dispossession are inherently disruptive of state and local governance and the settled expectations of current landowners, and are subject to dismissal on the basis of laches, acquiescence, and impossibility"), *cert. denied*, 135 S. Ct. 1492 (2015).

The Ninth Circuit decision conflicts with *City of Sherrill* and the Second Circuit decisions applying it. The Ninth Circuit brushed aside *Sherrill* because *Sherrill* involved different facts—tribal rights within an "abandoned reservation." App. 99a. But, as the dissenting judges recognized, "*Sherrill* made clear that laches can apply to Indian treaty rights, [so] it should not matter whether a party is seeking to apply laches in the context of sovereignty over land or the

enforcement of rights appurtenant to land (the ability to fish)." App. 35a. Having rejected *Sherrill* with a meaningless distinction, the panel then applied old Ninth Circuit precedent to hold that equitable defenses cannot be used to defeat a suit by the United States to enforce Indian treaty rights. App. 97a-98a. But the Second Circuit has held exactly the opposite under *Sherrill*. *Oneida Indian Nation of New York*, 617 F.3d at 129; *Cayuga Indian Nation of New York*, 413 F.3d at 278-79; App. 34a.

The Ninth Circuit's refusal to consider equitable defenses merits review. The State has compelling equitable defenses available, if they could only be considered. As detailed above, the federal government funded, authorized, provided designs for, and/or granted permits for the very culverts it now says are treaty violations. ER 664, 1082. Before supplying the funds, design standards, and permits, the federal government was required to consider the Tribes' treaty fishing rights. *See Nance v. Envtl. Prot. Agency*, 645 F.2d 701, 710, 711 (9th Cir. 1981) ("It is fairly clear that any Federal government action is subject to the United States' fiduciary responsibilities toward the Indian tribes."), *cert. denied*, 454 U.S. 1081 (1981). As the dissent noted: "Given the United States' involvement in designing the culverts and its long acquiescence in their existence, one might suppose that an equitable doctrine . . . would bar suit by the United States." App. 33a. And if equitable doctrines bar suit by the United States, the Tribes could not separately sue the State

because of the State's sovereign immunity. App. 35a (citing *Idaho v. Coeur d'Alene Tribe of Idaho*, 521 U.S. 261, 268 (1997)). This Court should grant certiorari to address this issue.

C. The Ninth Circuit's Decision Conflicts with Prior Decisions of this Court about the Proper Scope of Injunctive Relief

Even if the Ninth Circuit's approach to treaty interpretation and equitable defenses were consistent with this Court's holdings, the injunction it affirmed is not. This Court should grant certiorari to address the conflict between its precedent about the proper scope of injunctive relief (especially against sovereign States) and the breathtakingly broad injunction the Ninth Circuit affirmed here.

This Court has held that injunctions are extraordinary remedies, should be narrowly tailored to redress only conduct that violates federal law, and should be issued only after careful consideration of their public impacts. *See, e.g.*, *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 165 (2010); *Winters v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 24 (2008). Moreover, when a plaintiff seeks a federal injunction against a state, "appropriate consideration must be given to principles of federalism." *Rizzo v. Goode*, 423 U.S. 362, 379 (1976). "Federalism concerns are heightened when," as here, "a federal court decree has the effect of dictating state or local budget priorities." *Horne v. Flores*, 557 U.S. 433, 448 (2009). And when there is a "patently inadequate basis for a conclusion of systemwide violation," it is error to impose "systemwide relief." *Lewis v. Casey*, 518 U.S. 343, 359 (1996).

At least three aspects of the Ninth Circuit opinion conflict with these principles.

First, the panel ordered the State to replace culverts even when doing so will make no difference to salmon. The panel ordered the State, by 2030, to replace any state-owned highway barrier culvert that "has 200 lineal meters or more of salmon habitat upstream to the first *natural* passage barrier," regardless of any man-made barriers surrounding the state culvert. App. 104a (emphasis added), 237a. Thus, the State must replace its culverts even if other man-made barriers upstream and/or downstream prevent salmon from reaching the state culvert. App. 37a. In other words: "[T]he injunction requires [Washington] to replace or repair all 817 culverts located in the area covered by the Treaties without regard to whether replacement of a particular culvert actually will increase the available salmon habitat." App. 37a. This flaw permeates the injunction because: (1) roughly 90% of state barrier culverts are upstream or downstream of other barriers, ER 629; (2) state-owned culverts are less than 25% of known barrier culverts, ER 1045; and (3) in many watersheds, non-state barrier culverts drastically exceed state-owned culverts, by up to 36 to 1. ER 196-211, 407-555; *see* App. 203a.

Ordering the State to replace culverts that will make no difference flies in the face of basic principles of federalism and federal court jurisdiction. Injunctive relief is supposed to address violations of federal law,

not a court's policy preferences, yet the Ninth Circuit never explained how a State culvert could possibly violate the treaties if no salmon can reach it in the first place. And it is untenable for the Ninth Circuit to order the State to spend money replacing such culverts when the expense will come at the cost of state funding for other priorities, potentially including salmon restoration efforts that could actually have an impact. *See, e.g.*, *Horne*, 557 U.S. at 448 ("When a federal court orders that money be appropriated for one program, the effect is often to take funds away from other important programs.").

Second, the injunction requires replacement of state culverts throughout western Washington without any evidence that any particular culvert or group of culverts has reduced the number of fish that would otherwise reach tribal fishing areas. The panel ignored this lack of evidence, instead relying on the generalized claim that "hundreds of thousands of adult salmon will be produced by opening up the salmon habitat that is currently blocked by the State's barrier culverts." App. 115a. But the evidence does not support that claim.

As the panel acknowledged, salmon numbers in Washington first declined dramatically in the early 1900's (because of overharvesting), long before the State began building highways or culverts. App. 70a; ER 970-71. And there is no clear relationship between the number of state highway culverts and salmon

populations. Washington's state highway system has been essentially the same size since the 1960's, *see* ER 312, but salmon harvests in western Washington have fluctuated enormously since then, reaching a high of nearly 11 million fish in 1985, dropping to a low of under 900,000 fish by 1999, and then rebounding to over 4 million fish by 2003. *See* ER 267; App. 183a-88a (tribal harvests).

In nonetheless concluding that "hundreds of thousands of adult salmon will be produced by" replacing "the State's barrier culverts," App. 115a, the panel relied primarily on a 1997 report to the Washington Legislature, App. 108a-09a. But the district court—the factfinder—rejected the use of that report to predict "lost" salmon as unreliable and never cited it in its findings of fact. App. 245a-47a, 130a-73a. The district court noted that in suggesting how many salmon could be produced by removing barrier culverts, the report ignored all other factors, "such as the presence of other, non-[state] culverts, other habitat modifications, and many other environmental factors." App. 247a. Thus, the Ninth Circuit relied on exactly the sort of conjecture that provides a "patently inadequate basis for a conclusion of systemwide violation and imposition of systemwide relief." *Lewis*, 518 U.S. at 359.

Finally, the injunction ignores the stark inequity of the federal government using a treaty it signed to force the State (a nonparty) to bear the entire cost of replacing culverts that the federal government designed and permitted. "[W]hen a district court" considers a request for injunction, its "function is 'to do equity and to mould each decree to

the necessities of the particular case.'" *Monsanto Co.*, 561 U.S. at 174 (quoting *Hecht Co. v. Bowles*, 321 U.S. 321, 329 (1944)). That imperative should have carried extra weight here given that the defendant is a State. *Rizzo*, 423 U.S. at 379. And there are strong equities on the State's side, including the federal role in designing and permitting these culverts, the State's own recognition of and efforts to address (before any federal intervention) the potential problems federal culvert designs could pose for salmon, and that the State has for decades "spent millions of dollars on programs specifically designed to preserve, to protect, and to enhance the salmon population." App. 28a n.8. Unfortunately, rather than recognizing these equitable factors on the State's side, the panel made this case an example of how "no good deed goes unpunished." *Winters*, 555 U.S. at 31.

In sum, this Court's directives should have counseled the panel to limit any injunction to the narrowest needed, to carefully avoid imposing unnecessary costs on the State, and to consider the equities in fashioning relief. The panel departed from all of these core principles, and this Court should grant certiorari to direct the Ninth Circuit to, at the very least, bring the scope of the injunction in line with this Court's precedent.

D. This Case is Exceptionally Important

While much about this case is hotly contested, its importance is not. Even setting aside the immense costs the decision will impose on the State for replacing culverts (many of which will make no difference), the decision would warrant this Court's review.

This case began in 1970, and the panel's decision ensures that it will never end. As the nine judges objecting to the denial of rehearing pointed out: "The panel opinion fails to articulate a limiting legal principle that will prevent its holding from being used to attack a variety of development, construction, and farming practices, not just in Washington but throughout the Pacific Northwest." App. 19a. The panel essentially reasoned that: (1) tribes have a right to a moderate living from fishing; (2) they currently are not earning a moderate living from fishing; (3) State culverts play some role in reducing the number of fish available; therefore (4) State culverts violate the treaties. App. 27a-28a. But as the dissent pointed out, the same reasoning could be used to demand any number of changes in longstanding governmental and private practices, from "the removal of dams" to altering farming practices to the elimination of century-old water rights. App. 28a. Tribal advocates agree, noting that: "[T]he tribes have established a winning strategy . . . pick one of the myriad activities that degrade salmon habitat, connect the degradation to the depressed salmon populations . . . and assert that diminished salmon numbers prohibit the tribal harvest from providing tribal members a 'moderate living.'" Michael C. Blumm & Jane G. Steadman, *Indian Treaty Fishing Rights and Habitat Protection: The* Martinez *Decision Supplies a Resounding Judicial Reaffirmation*, 49 Nat. Resources J. 653, 700-01 (Summer 2009); Mason D. Morisset & Carly A. Summers, *Clear Passage: The Culvert Case Decision as a Foundation for Habitat Protection and Preservation*, Seattle J. Envtl. L. 29, 54 (Spring 2009), law.seattleu.edu/Documents/bellweth

er/2009spring/MorissetSummers.pdf (describing the import of the district court's rulings as being that "any factor that is 'a cause' of [salmonid] diminishment may be subject to injunctive relief"). Moreover, "the future reach of this decision extends far beyond the State of Washington," as "the same fishing rights are reserved to tribes in Idaho, Montana, and Oregon." App. 29a.

In short, there is near universal agreement that "[t]he panel opinion's reasoning . . . is incredibly broad, and if left unchecked, could significantly affect natural resource management throughout the Pacific Northwest[.]" App. 41a. *See also* Michael C. Blumm, *Treaty Fishing Rights and the Environment; Affirming the Right to Habitat Protection and Restoration*, 92 Wash. L. Rev. 1, 5 (Mar. 2017) (counsel for one of tribes' amici noting that "the decision's implications beyond Washington and beyond state-owned road culverts portend significant future changes in land and water-use management in the Northwest"). Whether one thinks that massive change in law is good or bad, it should at least be addressed by this Court.

CONCLUSION

The panel opinion creates an expansive new treaty right contrary to this Court's precedent, ignores this Court's holdings about equitable defenses and

injunctive relief, and imposes an unworkable rule that provides no clear standard to guide Washington (or other States covered by these treaties) and that virtually guarantees that this case will never end. The Court should grant certiorari.

RESPECTFULLY SUBMITTED.

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August 17, 2017

APPENDIX

Order 1a
No. 13-35474 (9th Cir. May 19, 2017)
(Docket No. 140-1)

Order And Amended Opinion 58a
No. 13-35474 (9th Cir. June 27, 2016,
amended Mar. 2, 2017)
(Docket No. 139)

Memorandum And Decision..... 127a
No. CV 70-9213 (W.D. Wash. Mar. 29, 2013)
Subproceeding 01-01
(Document 752)

Supplement To Memorandum And Decision 180a
No. CV 9213 (W.D. Wash. Apr. 1, 2013)
Subproceeding 01-01
(Document 755)

Permanent Injunction Regarding
Culvert Correction 235a
No. C70-9213 (W.D. Wash. Mar. 29, 2013)
Subproceeding 01-01
(Document 753)

Order On Motions In Limine 243a
No. CV 9213RSM (W.D. Wash. Oct. 8, 2009)
Subproceeding 01-01
(Document 607)

Order On Cross-Motions For
Summary Judgment 249a
No. CV 9213RSM (W.D. Wash. Aug. 22, 2007)
Subproceeding 01-01
(Document 388)

Order Granting United States' And
Denying Washington's Motions
For Judgment 273a
No. C70-9213 (W.D. Wash. dated Sept. 5,
2001, filed Sept. 6, 2001)
Subproceeding 01-1
(Document 85)

FOR PUBLICATION
UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

UNITED STATES OF AMERICA; SUQUAMISH INDIAN TRIBE; SAUK-SUIATTLE TRIBE; STILLAGUAMISH TRIBE; HOH TRIBE; JAMESTOWN S'KLALLAM TRIBE; LOWER ELWHA BAN[D] OF KLALLAMS; PORT GAMBLE BAND CLALLAM; NISQUALLY INDIAN TRIBE; NOOKSACK INDIAN TRIBE; SKOKOMISH INDIAN TRIBE; SQUAXIN ISLAND TRIBE; UPPER SKAGIT INDIAN TRIBE; TULALIP TRIBES; LUMMI INDIAN NATION; QUINAULT INDIAN NATION; PUYALLUP TRIBE; CONFEDERATED TRIBES AND BANDS OF THE YAKAMA INDIAN NATION; QUILEUTE INDIAN TRIBE; MAKAH INDIAN TRIBE; SWINOMISH INDIAN TRIBAL COMMUNITY; MUCKLESHOOT INDIAN TRIBE, *Plaintiffs-Appellees,* v. STATE OF WASHINGTON, *Defendant-Appellant.*	No. 13-35474 D.C. Nos. 2:01-sp-00001-RSM 2:70-cv-09213-RSM ORDER

Filed May 19, 2017

Before: William A. Fletcher and Ronald M. Gould, Circuit Judges, and David A. Ezra,* District Judge.

Order;

Concurrence by Judge W. Fletcher; Opinion Respecting Denial by Judge O'Scannlain;

Statement by Judge Hurwitz

SUMMARY**

Tribal Fishing Rights

The panel denied a petition for a panel rehearing and denied a petition for rehearing en banc on behalf of the court in an action in which the panel affirmed the district court's injunction directing the State of Washington to correct culverts, which allow streams to flow underneath roads, because they violated, and continued to violate, the Stevens Treaties, which were entered in 1854-55 between Indian tribes in the Pacific Northwest and the Governor of Washington Territory.

Concurring in the denial of rehearing en banc, Judges W. Fletcher and Gould stated that the district court properly found that Washington State violated the Treaties by acting affirmatively to build state-owned roads, and to build and maintain salmon-blocking culverts under those roads. The

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* The Honorable David A. Ezra, United States District Judge for the District of Hawaii, sitting by designation.

**This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

Judges stated that there is ample evidence in the record that remediation of the State's barrier culverts will have a substantial beneficial effect on salmon populations, resulting in more harvestable salmon for the Tribes. As an incidental result, there will also be more harvestable salmon for non-Indians. The Judges noted that the United States requested an injunction requiring remediation of all of the State's barrier culverts within five years. The district court crafted a careful, nuanced injunction, giving the United States much less than it requested. The Judges stated that the district court properly found a violation of the Treaties by the State, and that it acted within its discretion in formulating its remedial injunction.

In an opinion respecting the denial of rehearing en banc, Judge O'Scannlain, joined by Judges Kozinski, Tallman, Callahan, Bea, Ikuta and N.R. Smith, and joined by Judges Bybee and M. Smith as to all but Part IV, stated that the panel opinion's reasoning ignored the Supreme Court's holding in *Washington v. Washington State Commercial Passenger Fishing Vessel Association*, 443 U.S. 658 (1979), and this Circuit's cases, was incredibly broad, and if left unchecked, could significantly affect natural resource management throughout the Pacific Northwest, inviting judges to become environmental regulators. Judge O'Scannlain stated that by refusing to consider the doctrine of laches, the panel opinion further disregarded the Supreme Court's decision in *City of Sherrill v. Oneida Indian Nation of New York*, 544 U.S. 197 (2005), relying instead on outdated and impliedly overruled precedent. Finally, Judge O'Scannlain stated that the panel opinion imposed

a poorly-tailored injunction which will needlessly cost the State of Washington hundreds of millions of dollars.

In a separate statement, Judge Hurwitz stated the dissent from the denial of rehearing en banc unfortunately perpetuated the false notion that the full court's refusal to exercise its discretion under Federal Rule of Appellate Procedure 35(a) is tantamount to the court "tacitly affirming the panel opinion's erroneous reasoning." Judge Hurwitz stated that, like the denial of certiorari by the Supreme Court, the denial of rehearing en banc simply leaves a panel decision undisturbed.

COUNSEL

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Clay R. Smith, Deputy Attorney General; Clive J. Strong, Chief of Natural Resources; Lawrence G. Wasden, Attorney General; Office of the Attorney General, Boise, Idaho; for Amicus Curiae State of Idaho.

Dominic M. Carollo, Yockim Carollo LLP, Roseburg, Oregon, for Amici Curiae Klamath Critical Habitat Landowners, Modoc Point Irrigation District, Mosby Family Trust, Sprague River Water Resource Foundation Inc., and TPC LLC.

ORDER

The panel, as constituted above, has voted unanimously to deny the petition for panel rehearing. Judges Fletcher and Gould have voted to deny the petition for rehearing en banc, and Judge Ezra so recommends.

A judge of the court called for a vote on the petition for rehearing en banc. A vote was taken, and a majority of the non recused active judges of the court failed to vote for en banc rehearing. Fed. R. App. P. 35(f).

The petition for rehearing and the petition for rehearing en banc, filed August 11, 2016, are **DENIED**.

W. FLETCHER and GOULD, Circuit Judges, concurring in the denial of rehearing en banc:*

The opinion in this case speaks for itself. *See United States v. Washington*, 853 F.3d 946 (9th Cir. 2017). We write to respond to the views of our colleagues who dissent from the decision of our court not to rehear the case en banc.

In 1854 and 1855, U.S. Superintendent of Indian Affairs and Governor of Washington

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* District Judge Ezra was a member of the three-judge panel that decided this case. Because Judge Ezra is not a member of the Ninth Circuit, he does not have the authority to vote on a petition for rehearing en banc.

Territory, Isaac I. Stevens, negotiated a series of virtually identical Treaties with the Indian Tribes that lived around Puget Sound. In return for their agreement to live on reservations, the Tribes were promised equal access to off-reservation fishing "at all usual and accustomed grounds and stations." The Supreme Court described the importance of the promise:

> During the negotiations, the vital importance of the fish to the Indians was repeatedly emphasized by both sides, and the Governor's promises that the treaties would protect that source of food and commerce were crucial in obtaining the Indians' assent.

Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n ("Fishing Vessel"), 443 U.S. 658, 676 (1979).

For more than 100 years, the State of Washington deliberately and systematically prevented the Tribes from engaging in the off-reservation fishing promised under the Treaties. The State eventually came to employ surveillance planes, high powered boats, tear gas, billy clubs and guns against tribal members engaged in off-reservation fishing. In 1970, the United States brought suit against Washington State to enforce the Treaties.

The district court held that the Treaties promised the Tribes fifty percent of the harvestable salmon in any given year. The Supreme Court affirmed, holding that the Tribes had been promised a "moderate living" from fishing, and that they were entitled to fifty percent of the harvest, up to the point where they were able to catch enough

salmon to provide a moderate living. *Id.* at 686. The district court entered a detailed injunction which the State strenuously resisted. The Supreme Court affirmed the injunction:

> It is . . . absurd to argue . . . both that the state agencies may not be ordered to implement the decree and also that the District Court may not itself issue detailed remedial orders as a substitute for state supervision.

Id. at 695.

The current proceeding is a continuation of the suit brought by the United States in 1970.

Salmon are anadromous fish—hatching in fresh water, migrating to the ocean to mature, and returning to fresh water to spawn—so access to spawning grounds is essential to their reproduction and survival. For many years, the Tribes had complained that the State had built roads across salmon-bearing streams, and that it had built culverts under the roads that allowed passage of water but not passage of salmon. The United States instituted the current proceeding in 2001 to require the State to modify its culverts to allow passage of salmon.

The State has fought the proceeding tooth and nail. The State contended, and continues to contend, that it can block every salmon-bearing stream into Puget Sound without violating the Treaties. The district court disagreed and held that the State's affirmative act of building roads with salmon-blocking, or "barrier," culverts violated the Treaties. The district court sought the State's participation and assistance in drafting a remedial injunction,

but the State refused to participate. Despite the State's refusal, the district court entered an injunction that was substantially more favorable to the State than the injunction sought by the United States.

The State appealed, objecting to the district court's holding that its affirmative acts in building roads with barrier culverts violated the Treaties. Without conceding that it violated the Treaties, the State also objected to the scope of the injunction in whose formulation it had declined to participate. We affirmed.

Our dissenting colleagues object to our decision on four grounds. We respond to the objections in turn.

I. Violation of the Treaties

First, our colleagues contend that we have misread the Supreme Court's 1979 decision in *Fishing Vesssel*. They contend that fifty percent of the harvestable salmon is an absolute "ceiling" on the amount of fish the Tribes have been promised. They contend that the Treaties promised only that the Tribes will get fifty percent of the harvestable salmon, and that Treaties permit the State to take affirmative acts that have the effect of diminishing the supply of salmon below the amount necessary to provide a moderate living. According to our colleagues, if the State acts affirmatively to entirely eliminate the supply of harvestable salmon, the Tribes get fifty percent of nothing.

Our colleagues misread *Fishing Vessel*. The Court recognized that the Treaties promised that the Tribes would have enough salmon to feed themselves.

In the words of the Court, the Treaties promised that the Tribes would have enough harvestable salmon to provide a "moderate living." *Fishing Vessel*, 433 U.S. at 686. The Tribes get only fifty percent of the catch even if the supply of salmon is insufficient to provide a moderate living. However, there is nothing in the Court's opinion that authorizes the State to diminish or eliminate the supply of salmon available for harvest.

It is undisputed that at the present time fifty percent of the harvestable salmon in Puget Sound does not provide a moderate living to the Tribes. It is also undisputed that the State has acted affirmatively to build roads with barrier culverts that block the passage of salmon, with the consequence of substantially diminishing the supply of harvestable salmon. Evidence at trial showed that remediation of the State's barrier culverts will increase the yearly supply of salmon by several hundred thousand adult salmon. Half of the newly produced harvestable salmon will be available to the Tribes. The other half will be available to non-Indians.

Our opinion does not hold that the Tribes are entitled to enough salmon to provide a moderate living, irrespective of the circumstances. We do not hold that the Treaties' promise of a moderate living is valid against acts of God (such as an eruption of Mount Rainier) that would diminish the supply of salmon. Nor do we hold that the promise is valid against all human-caused diminutions, or even against all State-caused diminutions. We hold only that the State violated the Treaties when it acted affirmatively to build roads across salmon bearing

streams, with culverts that allowed passage of water but not passage of salmon.

II. Effect and Scope of the Holding

Second, our colleagues contend that our decision may open the door to "a whole host of future suits," and that we do "nothing to cabin [our] opinion." We are not sure what the hypothesized future suits would be. But we are sure that we have not opened the floodgates to a host of future suits.

Because of the Eleventh Amendment, a further suit against Washington State seeking enforcement of the Treaties cannot be brought by the Tribes. Nor can it be brought by non-Indians who would benefit from an increase in harvestable salmon (recall that 50% of any increased salmon harvest will go to non-Indians). Nor can it be brought by environmental groups. The only possible plaintiff is the United States. The United States is a responsible litigant and is not likely to burden the States without justification. The history of this litigation demonstrates that it was no easy thing for the Tribes to persuade the United States to institute proceedings against the state of Washington to seek remediation of the State's barrier culverts, and will be no easy thing for other Northwest tribes to persuade the United States to bring comparable suits against other States.

Our opinion describes the facts of this litigation carefully and in detail, as required by our decision in *United States v. State of Washington*, 759 F.2d 1353, 1357 (9th Cir. 1985) (en banc) ("[T]he measure of the State's [Treaty] obligation will depend for its precise legal formulation on all of the facts

presented by a particular dispute."). Cabining our opinion by means other than a careful, detailed description of the facts presented would have entailed positing hypothetical facts in cases not before us and giving an improper advisory opinion. On the facts presented to us, we held that the State violated the Treaties when it acted affirmatively to block salmon-bearing streams by building roads with culverts that protected the State's roads but killed the Tribes' salmon. Other cases with different facts might come out differently, but we did not decide—and should not have decided—such cases.

III. Laches

Third, our colleagues contend that the United States' suit on behalf of the Tribes is barred by laches. There is an established line of cases holding that the United States cannot, based on laches or estoppel, render unenforceable otherwise valid Indian treaty rights. Our colleagues contend that these cases have been overruled by *City of Sherrill v. Oneida Indian Nation of N.Y.*, 544 U.S. 197 (2005), and that laches applies here.

This contention is belied by *Sherrill* itself. In 1788, the Oneida Indian Nation ("OIN"), located in New York State, had a reservation of 300,000 acres. By 1920, the OIN had sold off all but 32 acres. In 1985, the Supreme Court held that the sale of OIN lands had been illegal, and that the OIN was entitled to monetary compensation for the sales. *County of Oneida v. Oneida Indian Nation of N.Y.*, 470 U.S. 226 (1985). The OIN subsequently bought two parcels of land within the boundaries of its ancestral reservation. The parcels had been sold to a non-Indian in 1807. The OIN asserted that the

repurchased parcels were sovereign tribal property and therefore free from local taxation. The Supreme Court disagreed. It wrote, "[T]he Tribe cannot unilaterally revive its ancient sovereignty . . . over the parcels at issue. The Oneidas long ago relinquished the reins of government and cannot regain them through open market purchases from current titleholders." *Sherrill*, 544 U.S. at 203.

The case before us is different from *Sherrill*. The question in our case is not whether, as in *Sherrill*, a tribe can reassert sovereignty over land within the boundaries of an abandoned reservation. The Tribes have not abandoned their reservations. Nor is the question whether, as in *Sherrill*, the Tribes have acted to relinquish their rights under the Treaties. The Tribes have done nothing to authorize the State to construct and maintain barrier culverts. Nor, finally, is the question whether, as in *Sherrill*, to allow the revival of disputes or claims that have long been dormant. Washington and the Tribes have been in a continuous state of conflict over treaty-based fishing rights for well over one hundred years.

IV. Breadth of the Injunction

Fourth, our colleagues contend that the injunction is overbroad. The United States requested an injunction that would have required the remediation of all of the State's barrier culverts within five years. The district court declined that request. Instead, it issued a nuanced injunction requiring the remediation of some, but not all, of the barrier culverts within seventeen years.

Briefly stated, the injunction provides as follows. The only seriously debated culverts are

those under the control of the Washington State Department of Transportation ("WSDOT"). The court ordered the State to prepare a list of all of WSDOT barrier culverts within the area covered by the Treaties. In Paragraph 6 of the injunction, the court ordered WSDOT to provide, within seventeen years, fish passage for each barrier culvert with more than 200 linear meters of accessible salmon habitat upstream to the first natural passage barrier. In Paragraph 7, the court ordered WSDOT to replace existing barrier culverts above which there was less than 200 linear meters of upstream accessible salmon habitat only at the "end of the useful life" of the culverts, or sooner "as part of a highway project." In Paragraph 8, the court allowed WSDOT to defer correction of some of the culverts described in Paragraph 6. Deferred culverts can account for up to ten percent of the total accessible upstream habitat from the culverts described in Paragraph 6. WSDOT can choose which culverts to defer, after consulting with the United States and the Tribes. Culverts deferred under Paragraph 8 need only be replaced on the more lenient schedule specified in Paragraph 7.

The injunction thus divided WSDOT barrier culverts into two categories. High priority category culverts must be remediated within seventeen years. Low priority category culverts must be remediated only at the end of the natural life of the existing culvert, or in connection with a highway project that would otherwise require replacement of the culvert. Deferred culverts in the high priority category (culverts blocking a total of ten percent of the accessible upstream habitat above all the high priority culverts) can be remediated on the schedule

of low priority culverts.

In identifying the State's barrier culverts and sorting them into the two categories, the district court focused on the amount of available upstream spawning habitat before encountering a natural barrier. Culverts with more than 200 linear meters of accessible upstream habitat are in the high category; culverts with less than 200 meters are in the low category. The court ignored the existence of man-made barriers, including those downstream of the State's barrier culverts. In so doing, the court followed the methodology of the State in identifying and prioritizing culverts that should be remediated. The State could have objected to the court's reliance on its own methodology, but it did not do so.

There were good reasons for the district court to ignore, for purposes of its injunction, the existence of downstream barriers. The most obvious reason is the following: The State identified a total of 817 state-owned barrier culverts, including both high and low priority culverts. On streams where there are both state and non-state barrier culverts, there are 1,590 non-state culverts. Of those, 1,370 are upstream of the state culverts; only 220 are downstream. Of those 220 downstream culverts, 152 allow partial passage of salmon; only 68 entirely block passage.

Even if we were to make the assumption that all 817 of the identified barrier culverts are high priority culverts (which they clearly are not), state-provided documents introduced at trial showed that roughly 230 of them—more than all of the 220 non-state downstream culverts combined—need not be remediated within seventeen years. They may be

deferred and need be remediated only at the end of their natural life or in connection with an independently undertaken highway project. Further, Washington law already imposes some obligation on the part of owners of non-state barrier culverts to repair or replace them, at their own expense, to allow fish passage.

Our dissenting colleagues emphasize the high cost of complying with the injunction. Our colleagues, like the State, exaggerate the cost. The State claimed in its brief to us that compliance with the injunction will cost a total of $1.88 billion. Our colleagues highlight that figure at the beginning of their dissent. There is no plausible basis for the State's claim of $1.88 billion. We analyze the evidence in detail in our opinion, to which we refer the reader. For present purposes, it is sufficient to note, as we point out in our opinion, that "Washington's cost estimates are not supported by the evidence." *United States v. Washington*, 853 F.3d at 976.

* * *

In sum, the district court properly found that Washington State violated the Treaties by acting affirmatively to build state-owned roads, and to build and maintain salmon-blocking culverts under those roads. By allowing passage of water, the culverts protect the State's roads. But by not allowing passage of fish, the culverts kill the Tribes' salmon. There is ample evidence in the record that remediation of the State's barrier culverts will have a substantial beneficial effect on salmon populations, resulting in more harvestable salmon for the Tribes. As an incidental result, there will also

be more harvestable salmon for non-Indians. The United States requested an injunction requiring remediation of all of the State's barrier culverts within five years. The district court crafted a careful, nuanced injunction, giving the United States much less than it requested. We unanimously concluded that the district court properly found a violation of the Treaties by the State, and that it acted within its discretion in formulating its remedial injunction.

O'SCANNLAIN, Circuit Judge,* with whom KOZINSKI, TALLMAN, CALLAHAN, BEA, IKUTA, and N.R. SMITH, Circuit Judges, join, and with whom BYBEE and M. SMITH, Circuit Judges, join as to all but Part IV, respecting the denial of rehearing en banc:

Fashioning itself as a twenty-first century environmental regulator, our court has discovered a heretofore unknown duty in the Stevens Indian Treaties of 1854 and 1855. The panel opinion in this case enables the United States, as a Treaty signatory, to compel a State government to spend

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* As a judge of this court in senior status, I no longer have the power to vote on calls for rehearing cases en banc or formally to join a dissent from failure to rehear en banc. *See* 28 U.S.C. § 46(c); Fed. R. App. P. 35(a). Following our court's general orders, however, I may participate in discussions of en banc proceedings. *See* Ninth Circuit General Order 5.5(a).

$1.88 billion[1] to create additional salmon habitat by removing or replacing culverts[2] under state-maintained highways and roads, wherever found. Pacific Northwest salmon litigation has been ongoing for almost fifty years,[3] has been before our court multiple times, and has been up to and down from the Supreme Court. Nonetheless, it apparently *just* occurred to the Tribes, the United States, and our court that in order to fulfill nineteenth century federal treaty obligations, the State of Washington must now be required to remove physical barriers which might impede the passage of salmon. *See Washington V*, 853 F.3d at 966.

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[1] According to the State's estimate. There is a dispute about the actual cost of the injunction, but even using the more conservative estimates on which the district court relied, the cost of replacing all 817 culverts ranges from $538 million to $1.5 billion (the average cost of replacing a culvert was $658,639 to $1,827,168). *See United States v. Washington*, 853 F.3d 946, 976 (9th Cir. 2017) ("*Washington V*").

[2] A culvert is "[a] tunnel carrying a stream or open drain under a road or railway." *Culvert*, OxfordDictionaries.com, https://en.oxforddictionaries.com/definition/culvert (last visited April 29, 2017).

[3] Five iterations of the *United States v. Washington* litigation, including this case, which is referred to as *Washington V*, are mentioned herein and are referred to as *Washington I*, *Washington II*, etc.

Given the significance of this case—both in terms of dollars and potential precedential effect—it seemed the ideal candidate for en banc review and, hopefully, correction on the merits. But rather than reining in a runaway decision, our court has chosen to do nothing—tacitly affirming the panel opinion's erroneous reasoning.

With utmost respect, I believe our court has made a regrettable choice.

I

In reaching its conclusion, the panel opinion makes four critical errors.

First, it misreads *Washington v. Washington State Commercial Passenger Fishing Vessel Association* ("*Fishing Vessel*"), 443 U.S. 658 (1979), as requiring Washington to ensure that there are a certain "number of fish" available for the Tribes, "sufficient to provide a 'moderate living.'" *Washington V*, 853 F.3d at 965 (quoting *Fishing Vessel*, 443 U.S. at 686).

Second, by holding that culverts need to be removed because they negatively impact the fish population, the panel opinion sets up precedent that could be used to challenge activities that affect wildlife habitat in other western states, which led Idaho and Montana to join Washington in requesting rehearing. The panel opinion fails to articulate a limiting legal principle that will prevent its holding from being used to attack a variety of development, construction, and farming practices, not just in Washington but throughout the Pacific Northwest.

Third, the panel opinion contravenes *City of Sherrill v. Oneida Indian Nation of New York*, 544 U.S. 197 (2005), by refusing to apply the doctrine of laches to the United States.

Fourth, the panel opinion upholds an injunction that is overbroad—requiring the State to spend millions of dollars on repairs that will have no immediate effect on salmon habitat.

II

The Stevens Treaties[4] provide that "[t]he right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory." *Fishing Vessel*, 443 U.S. at 674. The precise contours of this guarantee remain hotly contested but were most fully addressed by the Supreme Court's opinion in *Fishing Vessel*.

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[4] The Treaties are a series of Senate-ratified agreements between the United States and various Indian tribes that were negotiated in the 1850s by Isaac Stevens, then-federal Governor and Superintendent of Indian Affairs of the Washington Territory (pre-statehood), under which the Tribes agreed to give up land in exchange for monetary payments. *Fishing Vessel*, 443 U.S. at 661–62, 666. The Treaties contained clauses reserving the Tribes' right to fish on ceded land. *See, e.g.*, Treaty of Medicine Creek, 10 Stat. 1132 (1854). Beginning with U.S. District Court Judge George Boldt's

A

The panel opinion reads language in *Fishing Vessel* as requiring that there be enough fish to provide a "moderate living" for the Tribes. *See Washington V*, 853 F.3d at 965–66. It is true that the Court stated that "Indian treaty rights to a natural resource [i.e. fish]. . . secures so much as, but no more than, is necessary to provide the Indians with a livelihood—that is to say, a moderate living." *Fishing Vessel*, 443 U.S. at 686. In isolation, this statement might be read as guaranteeing the Tribes a certain number of fish, but only if one ignores the rest of the opinion. In *Fishing Vessel*, the Supreme Court adopted the United States' position that the Treaties entitled the Tribes "either to a 50% share of the 'harvestable' fish" passing through their fishing grounds "or to their needs, *whichever was less.*" *Id.* at 670 (emphasis added); *see also id.* at 685–86.

Thus, notwithstanding the significance of fish to the Tribes, the Court recognized that "some ceiling should be placed on the Indians' apportionment to prevent their needs from exhausting the entire resource and thereby frustrating the treaty right of 'all [other] citizens of

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decision in 1974, *United States v. State of Washington*, 384 F. Supp. 312 (W.D. Wash. 1974) ("*Washington I*"), the contours of these fishing rights have been the subject of extensive litigation before the district court, our court, and the Supreme Court and tumultuous protests by the people impacted by these decisions.

the Territory.'" *Id.* at 686. The Court ruled that 50% of the available fish was the appropriate limit. *See id.* ("[T]he 50% figure imposes a maximum . . . allocation.") ("[T]he maximum possible allocation to the Indians is fixed at 50%."); *id.* at 686 n.27 ("Because the 50% figure is only a ceiling, it is not correct to characterize our holding as 'guaranteeing the Indians a specified percentage' of the fish.").

Such ceiling makes intuitive sense. With or without pre-existing barriers, the population of fish varies dramatically from year to year and season to season. In a year with a low run of fish, absent a ceiling, the Tribes' needs could easily predominate, leaving few fish for other citizens. Thus, to protect the rights of all parties to the Treaties, the Court imposed a 50% ceiling.

Since the fish population varies, however, the presence of the ceiling necessarily entails that the Tribes may not always receive enough fish to provide a "moderate living." Indeed, the Court emphasized that the Treaties secured to the Tribes "a fair share of the *available* fish," rather than a certain *number* of fish. *Id.* at 685 (emphasis added). The total number of fish that the Tribes receive indubitably will vary with the run of fish. *See id.* at 679 (observing that the Treaties "secure the Indians' right to take a share *of each run* of fish that passes through tribal fishing areas" (emphasis added)); *id.* at 687 (discussing the "50% allocation of an entire run that passes through . . . customary fishing grounds").

Thus, by imposing a percentage ceiling tied to the relevant run rather than a fixed numerical floor, the Court rejected the proposition that the

Tribes were entitled to a certain number of fish. Indeed, "while the maximum possible allocation to the Indians is fixed at 50%, the minimum is not; the latter will, upon proper submissions to the District Court, be modified in response to changing circumstances."[5] *Id.* at 686–87. Our court has confirmed this holding multiple times.

In *United States v. Washington*, 759 F.2d 1353, 1359 (9th Cir. 1985) ("*Washington III*"), our en banc court explained:

> [T]he Supreme Court in *Fishing Vessel did not hold that the Tribes were entitled to any particular minimum allocation of fish.* Instead, *Fishing Vessel* mandates an allocation of 50 percent of the fish to the Indians, subject to downward revision if moderate living needs can be met with less. The *Tribes have a right to at most one-half of the harvestable fish in the case area.*

Id. (emphasis added). Likewise in *Midwater Trawlers Co-operative v. Department of Commerce*, 282 F.3d 710, 719 (9th Cir. 2002), we observed that under *Fishing Vessel*, the Makah Tribe was entitled "to one-half the harvestable surplus of Pacific whiting that passes through its usual and

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[5] Such changing circumstances include the Tribes finding "other sources of support that lead it to abandon its fisheries." *Id.* at 687. Washington does not present this contention, but arguably the tribal economy has changed dramatically since the enactment of the Stevens Treaties, leading the Tribes to rely less on fish for their subsistence.

accustomed fishing grounds, or that much of the harvestable surplus as is necessary for tribal subsistence, *whichever is less.*" *Id.* (emphasis added). Most recently in *Skokomish Indian Tribe v. United States*, 410 F.3d 506, 513 (9th Cir. 2005), our en banc court again described *Fishing Vessel* as holding that the Tribes were "entitled to an equal measure of the harvestable portion of each run that passed through a 'usual and accustomed' tribal fishing ground, adjusted downward if tribal needs could be satisfied by a *lesser amount.*" *Id.* (emphasis added) (quoting *Fishing Vessel*, 443 U.S. at 685–89).

By holding that the Treaties guarantee "that the *number* of fish would always be sufficient to provide a 'moderate living' to the Tribes," *Washington V*, 853 F.3d at 965 (emphasis added), the panel opinion turns *Fishing Vessel* on its head. It imposes an affirmative duty upon the State to provide a certain quantity of fish, which reads out the 50% ceiling entirely.

Instead, the panel opinion ignores the 50% ceiling, effectively adopting the position urged by the Tribes in *Fishing Vessel* that "the treaties had reserved a pre-existing right to as many fish as their commercial and subsistence needs dictated." 443 U.S. at 670. Yet, as explained, the Supreme Court has already rejected this approach, following instead the United States' position that the Tribes were guaranteed the *lesser* of their needs or 50% of the available run. *See id.* at 670, 685. Likewise, our court has rejected interpretations of *Fishing Vessel* that would entitle the Tribes to a "particular minimum allocation of fish." *Washington*

III, 759 F.2d at 1359. The panel opinion's holding misconstrues not only the Supreme Court's decision in *Fishing Vessel* but also our decisions in *Washington III*, *Midwater Trawlers*, and *Skokomish Indian Tribe*.

B

To reach its conclusion, the panel points to various statements allegedly made by Governor Stevens to the Tribes at the time the Treaties were negotiated in the 1850s. *Washington V*, 853 F.3d at 964–65. As the Supreme Court observed in *Fishing Vessel*, however, "[b]ecause of the great abundance of fish and the limited population of the area, it simply was not contemplated that either party would interfere with the other's fishing rights." 443 U.S. at 668. Indeed, the Supreme Court considered the very same statements in *Fishing Vessel* yet still chose to impose a 50% cap on the Tribes' share of available fish. *See id.* at 666–68 & nn. 9 & 11.[6] Such cap necessarily means that the Tribes are not always guaranteed enough fish to meet their needs. If the Supreme Court considered Stevens' statements and declined to find that the Tribes were entitled to a certain minimum quantity of fish, it eludes me how a panel of our court can reach the opposite conclusion by relying on these statements now. The panel opinion utterly fails to grapple with the 50% cap imposed by *Fishing Vessel*.

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[6] In fact, the panel opinion quotes *Fishing Vessel* for some of these statements. *See Washington V*, 853 F.3d at 964–65.

The panel opinion further cites to the Supreme Court's opinion in *Winters v. United States*, 207 U.S. 564, 576–77 (1908), and our opinion in *United States v. Adair*, 723 F.2d 1394, 1409, 1411 (9th Cir. 1983), as supporting its conclusion that the Stevens Treaties guarantee the Tribes a specific quantity of fish. Yet, neither *Winters* nor *Adair* is factually relevant. Each involved the question of whether certain tribes were entitled to various water rights on their reservations under the treaties creating the reservations.

In *Winters*, the Supreme Court held that the lands ceded to create the Fort Belknap Indian Reservation necessarily included the water rights accompanying such lands. *See* 207 U.S. at 565, 576–77. Likewise in *Adair*, we held "that at the time the Klamath Reservation was established, the [United States] and the Tribe intended to reserve a quantity of the water flowing through the reservation." 723 F.2d at 1410. Thus, both cases stand for the somewhat unremarkable proposition that in the context of Native American reservations, water rights accompany land rights.

It is true that both cases found water rights that were not explicitly detailed in the text of the treaties. Nonetheless, if we read these cases broadly to mean that we *can and should* infer a whole host of rights not contained in the four corners of tribal treaties, the possibilities are endless. Since the Supreme Court made it plain in *Fishing Vessel* that the Tribes are not entitled to a certain numerical amount of fish, we certainly should not rely on *Winters* and *Adair* to hold otherwise.

III

Even if one agrees with the panel opinion that the Tribes are entitled to a specific quantity of fish, however, it does not necessarily mean that the installation and maintenance of culverts run afoul of the Treaties. But assuming that they do, it is far from clear that the drastic remedy of removal or repair should be required.

A

Before reaching its conclusion that the State violated the Treaties, the panel opinion devotes minimal treatment to showing (1) that tribal members would engage in more fishing if there were more salmon and (2) that removing culverts would increase this salmon population. *See Washington V*, 853 F.3d at 966 (devoting three paragraphs to these issues).[7] The panel opinion acknowledges that the State of Washington was not intentionally trying to impact the fish population when it installed culverts under state highways and other roads.[8] *Id.* Nonetheless, the panel opinion

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[7] The panel opinion provides more factual support for the proposition that culverts adversely affect the population of salmon in considering the injunction, *see Washington V*, 853 F.3d at 972–75, but at that point it had already found that the Treaties were violated.

[8] The concurrence makes the extravagant assertion that I maintain that the Treaties allow the State to act "affirmatively to entirely eliminate the

concludes that because there was evidence that culverts affect fish population, and because the fish population is low, the State violated the Treaties by building and maintaining its culverts. *See id.*

This overly broad reasoning lacks legal foundation. There are many factors that affect fish population and multiple fish populations that are low.[9] Is any surface physical activity, wherever found, that negatively affects fish habitat an automatic Treaty violation? If so, the panel's opinion could open the door to a whole host of future suits.

While such speculation may sound far-fetched, in actuality, it is already occurring. Legal commentators have noted that plaintiffs could use the panel's decision to demand the removal of dams and attack a host of other practices that can degrade fish

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supply of harvestable salmon." What utter nonsense! I said no such thing! In building and maintaining the culverts, the State was not acting affirmatively to destroy the salmon population—any negative effects were incidental—as the panel opinion acknowledged. *See Washington V*, 853 F.3d at 966. Far from seeking to eliminate the salmon population, the State recognizes that it is a treasured resource and has spent millions of dollars on programs specifically designed to preserve, to protect, and to enhance the salmon population.

[9] *See, e.g.*, Washington Department of Fish & Wildlife, Washington's Native Char, http://wdfw.wa.gov/fishing/char/ (noting that the bull trout population is "low and in some cases declining").

habitat (such as logging, grazing, and construction).[10] The panel does nothing to cabin its opinion. Nor does it provide any detail for how to determine if a fish population has reached an appropriate size, making further remedial efforts unnecessary.

B

Furthermore, the future reach of this decision extends far beyond the State of Washington. As the amici observe, the same fishing rights are reserved to tribes in Idaho, Montana, and Oregon. Further, the Stevens Treaties also guarantee the Tribes the privilege of hunting. *See Fishing Vessel*, 443 U.S. at 674. There seems little doubt that future litigants will argue that the population of various birds, deer, elk, bears, and similar animals, which were traditionally hunted by the Tribes, have been impacted by Western development. If a court subsequently concludes that hunting populations are covered by the reasoning of this decision, the potential impact of this case is virtually limitless.

C

Yet, our court has already held that the Stevens Treaties cannot be used to attach broad "environmental servitudes" to the land. *See United States v. Washington*, 694 F.2d 1374, 1381 (9th Cir. 1982) (coining the term "environmental servitude"),

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[10] *See, e.g.*, Michael C. Blumm, *Indian Treaty Fishing Rights and the Environment: Affirming the Right to Habitat Protection and Restoration*, 92 Wash. L. Rev. 1, 29–31 (2017).

vacated on reh'g, *Washington III*, 759 F.2d at 1354–55 (but reaching similar result). Thus, in *Washington III*, our en banc court vacated a declaratory judgment from the district court which held "that the treaties impose upon the State a corresponding duty to refrain from degrading or authorizing the degradation of the fish habitat to an extent that would deprive the treaty Indians of their moderate living needs." 759 F.2d at 1355, *vacating United States v. Washington*, 506 F. Supp. 187, 208 (W.D. Wash. 1980) ("*Washington II*"). While the panel's opinion here deals with the specific issue of culverts, its reasoning is not so confined; it effectively imposes the same boundless standard upon the State—preventing habitat degradation—that we rejected in *Washington III*.

D

Once a court has decided that there has been a violation, it must address the remedy. The panel opinion acknowledges "that correction of barrier culverts is only one of a number of measures that can usefully be taken to increase salmon production."[11] *Washington V*, 853 F.3d at 974. And, the panel opinion further concedes "that the benefits of culvert correction differ depending on the

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[11] Indeed, the State argues that while the culverts have been in place, the fish harvest has fluctuated dramatically from "nearly 11 million fish in 1985" to "900,000 fish" in 1999, and then back to "over 4 million fish by 2003." Such evidence tends to suggest that culverts are not a primary driver of fish population.

culvert in question." *Id.* Yet, if culverts are only one "measure" that could affect the salmon population, what about the other measures? Why is it appropriate to require the State to correct culverts rather than something else? Since, at some level, almost all urban growth can impact fish populations, should the State be required to reverse decades of development in an effort to increase the number of fish? Is the answer that any activity that amounts to a Treaty violation must be halted or removed? The panel opinion offers no cost-benefit analysis, or any other framework, to guide future courts on what is an appropriate remedial measure (and what is *not*).[12]

In effect, the panel's decision opens a backdoor to a whole host of potential federal environmental regulation-making. And, it invites courts, who have limited expertise in this area, to serve as policymakers.

But the issues at the heart of this suit—development versus wildlife habitat, removal

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[12] It seems highly likely that if the panel opinion had engaged in such cost-benefit analysis, there would be more cost-effective ways to remedy the alleged Treaties violation. For example, a 1997 state report estimated that if the State replaced the culverts maintained by the Washington State Department of Transportation (which controls a majority of culverts), it would result in an annual increase of 200,000 salmon. *Washington V*, 853 F.3d at 970. It might be cheaper to stock an additional 200,000 salmon into Washington's streams each year.

versus accommodation— are properly left to the political process. Judges are ill- equipped to evaluate these questions. We deal in closed records and have difficulty obtaining and evaluating on-the- ground information—for example, which culverts it would be most cost-effective to remove over the next seventeen years.

Here, the State recognizes that "[s]almon are vital to Washington's economy, culture, and diet." Prior to the injunction, the State was already working to address problematic culverts, and the State has spent "hundreds of millions of dollars" on programs designed "to preserve and restore salmon runs." There is no justification for interfering with the State's existing programs.

IV

Notably, the panel opinion does not prohibit the State from installing future culverts. Instead, it orders the State to correct existing culverts. *See Washington V*, 853 F.3d at 979-80. Yet, according to the State, it was the federal government, now bringing suit in its capacity as trustee for the Tribes, which "*specified the design* for virtually all of the culverts at issue." Further, these culverts have been in place for many decades. According to the State, "Washington's state highway system has been essentially the same size since the 1960's," and thus presumably many culverts predated this litigation, which has been ongoing for almost fifty years. Apparently, however, no one thought that the culverts might be a problem until 2001 when the Tribes filed a request for determination that such pre-existing barriers were infringing the Treaties. *See Washington V*, 853 F.3d at 954.

Given the United States' involvement in designing the culverts and its long acquiescence in their existence, one might suppose that an equitable doctrine such as laches would bar suit by the United States. Indeed, "[i]t is well established that laches, a doctrine focused on one side's inaction and the other's legitimate reliance, may bar long-dormant claims for equitable relief." *City of Sherrill*, 544 U.S. at 217.

According to the panel opinion, however, "[t]he United States cannot, based on laches or estoppel, diminish or render unenforceable otherwise valid Indian treaty rights." *Washington V*, 853 F.3d at 967. The panel opinion cites several cases for this proposition, including the 1923 opinion of *Cramer v. United States*, 261 U.S. 219, 234 (1923) (holding that a government agent's unauthorized acceptance of leases of tribal land could not bind the government or tribe), and *United States v. Washington*, 157 F.3d 630, 649 (9th Cir. 1998) ("*Washington IV*") ("[L]aches or estoppel is not available to defeat Indian treaty rights."). *See Washington V*, 853 F.3d at 967.

Yet, the panel opinion's rejection of laches contravenes the Supreme Court's subsequent 2005 decision in *City of Sherrill*, 544 U.S. at 221. That case involved an attempt by the Oneida Indian Nation to reassert sovereignty over newly- purchased land that had once belonged to the Nation but had been sold in contravention of federal law (although with the apparent acquiescence of federal agents) approximately two hundred years before. *Id.* at 203-05, 211. In particular, the Nation sought to avoid local regulatory control and taxation of its newly-purchased parcels. *Id.* at 211.

The Supreme Court analogized the situation to a dispute between states, explaining that "long acquiescence may have controlling effect on the exercise of dominion and sovereignty over territory." *Id.* at 218. The Court further "recognized the impracticability of returning to Indian control land that generations earlier passed into numerous private hands." *Id.* at 219. Therefore, the Court concluded, "the Oneidas' long delay in seeking equitable relief against New York or its local units, and developments in the city of Sherrill spanning several generations, evoke the doctrines of laches, acquiescence, and impossibility, and render inequitable the piecemeal shift in governance this suit seeks unilaterally to initiate." *Id.* at 221.

Thus, *Sherrill* indicates that our court's previous holding in *Washington IV*, 157 F.3d at 649, that laches cannot be used "to defeat Indian treaty rights" is wrong and impliedly overruled. *Cf. Miller v. Gammie*, 335 F.3d 889, 900 (9th Cir. 2003). The Second Circuit has recognized as much, observing that *Sherrill* "dramatically altered the legal landscape" by permitting "equitable doctrines, such as laches, acquiescence, and impossibility" to "be applied to Indian land claims." *Cayuga Indian Nation v. Pataki*, 413 F.3d 266, 273 (2d Cir. 2005).

Yet, the panel opinion blindly cites *Washington IV* and sidesteps the central tenet of *Sherrill* by attempting to distinguish it on its facts. *See Washington V*, 853 F.3d at 967-68. The panel opinion tries to draw three distinctions: (1) this case does not involve the question of whether the Tribes can regain sovereignty over abandoned land; (2) the Tribes never authorized the design or construction

of the culverts; and (3) the Tribes are not trying to revive claims that have lain dormant. *Id.* at 968.

The first distinction is irrelevant; since *Sherrill* made clear that laches can apply to Indian treaty rights, it should not matter whether a party is seeking to apply laches in the context of sovereignty over land or the enforcement of rights appurtenant to land (the ability to fish).

Second, as Montana and Idaho observe, it does not matter that the Tribes never authorized the design or construction of the culverts because Washington is seeking to impose the doctrine of laches against the United States, not the Tribes. And, as the Second Circuit has made plain, the logic of *Sherrill* applies to the United States when it is acting as trustee for the Tribes. *See Oneida Indian Nation v. Cty. of Oneida*, 617 F.3d 114, 129 (2d Cir. 2010).

Notably, only the United States could bring suit against Washington for alleged culvert violations because Washington is protected by sovereign immunity against suit from the Tribes. *See Idaho v. Coeur d'Alene Tribe of Idaho*, 521 U.S. 261, 268 (1997). The panel opinion asserts that the United States cannot waive treaty rights, and this may be true as a general matter. *Washington V*, 853 F.3d at 967. Nonetheless, in the context of specific litigation, since the United States acts as the Tribes' trustee, such representation necessarily entails the ability to waive certain litigation rights (failing to bring a claim within the statute of limitations for example). Thus, the fact that the Tribes did not authorize the culverts is irrelevant; the United States did, and it further failed to object to the culverts for

many years.

Finally, I disagree with the panel opinion's assertion that the United States is not trying to revive claims that have lain dormant. Presumably, the State's alleged violation of the Treaties was complete when it constructed the culverts (and relevant highways) in the 1960s. The United States first brought suit to enforce the Tribes' fishing rights in 1970. *Washington V*, 853 F.3d at 958. Yet, the United States found no problem with the culverts until 2001. While the claims did not lie dormant for 200 years as in *Sherrill*, they were dormant for over 30 years. And as in *Sherrill*, there are significant practical issues involved with asserting the claims now such as the time, expense, and efficacy of removing the culverts. *See* 544 U.S. at 219.

Thus, while *Sherrill* may be factually distinct, it is also directly on point. The panel opinion errs by ignoring its central teaching. There is good reason to contend that the United States is barred from bringing this suit by the doctrine of laches. And, if the United States is barred from suit, the entire suit is prohibited, since the Tribes cannot puncture the State's defense of sovereign immunity on their own. *See Coeur d'Alene Tribe*, 521 U.S. at 268.

Rather than taking the opportunity to harmonize our precedent, the panel opinion ignores the changes wrought by *Sherrill*, defying the Supreme Court's direction.

V

Even if one concludes (1) that the Treaties guarantee the Tribes enough fish to sustain a

"moderate living," (2) that violation of such guarantee can and should be remedied by removing culverts, and (3) that the suit is not barred by the doctrine of laches, there is still good reason to reject the injunction itself as overbroad. As the State explains, the injunction requires it to replace or repair all 817 culverts located in the area covered by the Treaties without regard to whether replacement of a particular culvert actually will increase the available salmon habitat.

In addition to state-owned culverts, there are a number of other privately-owned culverts and barriers on the streams in question which are not covered by the injunction. Where there are non-state-owned culverts blocking fish passage downstream or immediately upstream from state-owned culverts, replacement of the State's culverts will make little or no difference on available salmon habitat. Indeed, the State observes that

> (1) roughly 90% of state barrier culverts are upstream or downstream of other barriers . . .
>
> (2) state-owned culverts are less than 25% of known barrier culverts . . . and (3) in many watersheds, non-state barrier culverts drastically exceed state-owned culverts, by up to a factor of 36 to 1[.]

The panel attempted to address this issue in its revised opinion. First, the opinion quotes testimony from a former State employee stating that Washington itself does not take into account the presence of non-state-owned barriers when calculating the priority index for which culverts to address. *Washington V*, 853 F.3d at 973. What the

opinion does not reveal, however, is that this same expert also testified that correcting state-owned culverts that are downstream from non-state barriers "generally" will not have an immediate impact or benefit on salmon habitat. And, according to the State of Washington, the priority index, notwithstanding its name, typically does not dictate which barriers the State addresses first; instead the State focuses on culverts in streams without barriers.

Next, the panel opinion points out that Washington law requires dams or other stream obstructions to include a fishway and observes that the State may take corrective action against private owners who fail to comply with this obligation. *Washington V*, 853 F.3d at 973 (quoting Wash. Rev. Code Ann. § 77.57.030(1)-(2)). Yet, what the panel opinion fails to disclose is that this law only went into effect in 2003 and specifically "grandfathered in" various obstructions that were installed before May 20, 2003. Wash. Rev. Code Ann. § 77.57.030(3). Presumably, some of the non-state barriers would fall under this exception.

Finally, the panel opinion observes that

> [I]n 2009, on streams where there were both state and non-state barriers, 1,370 of the 1,590 non-state barriers, or almost ninety percent, were upstream of the state barrier culverts. Sixty nine percent of the 220 downstream non-state barriers allowed partial passage of fish. Of the 152 that allowed partial passage, "passability" was 67% for 80 of the barriers and 33% for 72 of them.

Washington V, 853 F.3d at 973.

Given the significant cost of replacing barriers, however, being forced to replace even a single barrier that will have *no tangible impact* on the salmon population is an unjustified burden. Even using the most conservative estimates found by the district court, the average cost of replacing a single culvert is between $658,639 and $1,827,168. *Washington V*, 853 F.3d at 976.[13] We do not know the precise number of state-owned culverts that are located above non-state-owned culverts which prevent all fish passage. Yet, considering that there are at least sixty-eight non-state-owned barriers blocking *all* passage downstream from state-owned culverts,[14] there are almost certainly more than one or two culverts whose replacement would have no impact *whatsoever* on salmon habitat. The panel's opinion utterly fails to explain why the State should waste millions of dollars on such culverts in particular.

Further, even if the majority of non-state barriers are upstream, the court should still take into account the location of these barriers. As noted, if a non-state upstream barrier is close to or

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[13] Contrary to the curious claim in the concurrence that the costs are exaggerated, these figures were relied upon in the panel's own opinion!

[14] Sixty-eight equals thirty-one percent of 220. *See Washington V*, 853 F.3d at 973 (explaining that "[s]ixty nine percent of the 220 downstream non-state barriers [i.e. 152 culverts] allowed partial passage of fish," and thus by implication, thirty-one percent (i.e. 68 culverts) blocked all passage).

immediately above a state barrier, replacing the state barrier will have little effect on the size of salmon habitat, but it will come at a significant cost to the State.

The panel opinion observes that the injunction offers the State a longer schedule for replacing barriers that will open up less habitat. *See Washington V*, 853 F.3d at 974-75. It may be advantageous to the State to have the cost spread out over a longer time period, but whether it occurs five years or twenty-five years from now, the panel opinion fails to explain why taxpayers should be required to replace barriers that will not change the available salmon habitat.[15]

Thus, significant overbreadth problems remain. There is no doubt that the record in this case is voluminous and pinpointing the specific culverts whose removal might actually impact the available salmon habitat is an arduous task. Both the panel and district court made a valiant effort to wade through the many pages of maps and

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[15] In addition to the obvious financial cost to the State, there is also a broader cost to residents. Shortly after the panel's opinion was issued, various news stories informed residents of highway closings resulting from the repair of culverts associated with the injunction. *See, e.g.*, KIRO7, *S[R] 167 to be closed all weekend from Sumner to Auburn* (Aug. 19, 2016), http://www.kiro7.com/news/local/sb-167-to-be-closed-all-weekend-from-sumner-to-auburn/426411799.

statistics.[16] As it currently stands, however, the injunction is unsupportable.

VI

In sum, there were many reasons to rehear this case en banc. The panel opinion's reasoning ignores the Court's holding in *Fishing Vessel* and our own cases, is incredibly broad, and if left unchecked, could significantly affect natural resource management throughout the Pacific Northwest, inviting judges to become environmental regulators. By refusing to consider the doctrine of laches, the panel opinion further disregards the Supreme Court's decision in *Sherrill*, relying instead on outdated and impliedly overruled precedent from our court. Finally, the panel opinion imposes a poorly-tailored injunction which will needlessly cost the State hundreds of millions of dollars.

Rather than correcting these errors, our court has chosen the path of least resistance. We should have reheard this case en banc.

Separate Statement of HURWITZ, Circuit Judge:

The dissent from the denial of rehearing en banc unfortunately perpetuates the false notion that the full court's refusal to exercise its discretion under Federal Rule of Appellate Procedure 35(a) is tantamount to the court "tacitly affirming the panel opinion's erroneous reasoning." This effectively

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[16] Indeed, the difficulties of crafting an appropriate injunction illustrate why it is an undertaking best left to the State.

rewrites Rule 35(a). The Rule is entirely discretionary, providing that the court "may order" rehearing en banc, and cautioning that such an order "is not favored" and is reserved for "a question of exceptional importance" or "to secure or maintain uniformity of the court's decisions."

Like the denial of certiorari by the Supreme Court, the denial of rehearing en banc simply leaves a panel decision undisturbed. There are at least as many valid reasons for a circuit judge to decide not to vote to rehear a case en banc as there are for a Supreme Court justice to decide not to vote to grant certiorari. Indeed, there is at least one additional reason—Supreme Court review remains available to the losing litigant in our court, so it is not necessary that each of us have the last word on every case. No one would suggest that when the Supreme Court exercises its discretion not to grant certiorari, it is "tacitly affirming" the decision below. No different legal or factual conclusion can be made here.

Judges on our court—even those who cannot participate in the voting—are entirely free to criticize the court's failure to grant rehearing en banc and express their own views as to why a panel decision is incorrect. But it is not correct to impute hidden meanings to the discretionary decisions of others. When a judge chooses not to indicate views on the merits of a controversy, colleagues should not invent them.

en.oxforddictionaries.com

culvert – definition of culvert in English

5-6 minutes

noun

A tunnel carrying a stream or open drain under a road or railway.

'There are also plans to dig a culvert to carry water if the drainage ditch is full but he doubted there was enough room to dig one within the width of the road.'

'He directed the officials to complete the construction of culverts and link roads and ensure the proper drinking water supply.'

'What appears to be the problem to us is the size of a culvert underneath the road into the ornamental pond.'

'The project also required construction of a 29.5-foot fill over an old concrete box culvert.'

'According to the 1996 Highway Road Humps Regulations they must not be built on or within 25 metres of bridges, subways, culverts or tunnels.'

'These criminal acts will retard progress and push up costs of building the road as the demolished culverts will have to be replaced.'

'The South Fork of the Elkhorn River goes under the road in a culvert.'

'A nearby culvert, meant to carry away the sewage, is totally damaged.'

'Earth pressure distribution around concrete box culverts has been the subject of a few studies.'

'The tanks, roads, culverts and lagoon opening have all suffered through the lack of maintenance.'

'Variables considered in the analysis were culvert size, location, and wall thickness.'

'Aggravating the problems is a pair of culverts through Provincial Road 205, which have been set at the wrong level.'

'The figure also shows a little tensile stress at the roof center of larger culverts.'

'However, the size and weight of concrete box culverts can make transportation and handling a problem.'

'A culvert stabilized with snow was the first structure tested for small streams.'

'They also have to cut several miles of drain, installing several large culverts along the system.'

'Drivers often don't even realize when they cross streams, nor that the culverts built to carry those streams might pose problems to endangered salmon and trout species.'

'It is asphalted and the gradient runs south to north up to the village temple, except near the village pond where a culvert has raised the road surface, upsetting the natural gradient.'

'A culvert has also been opened up below one set of steps and all it would take is for one child to trip and fall head first into it.'

'Thus, culverts stabilized with snow are not needed when the stream is already frozen solid.'

verb

[WITH OBJECT]

Channel (a stream or drain) through a culvert.

'we have asked for the river to be culverted'

'Where I grew up in Ohio, we saw crawdads, or crayfish, in the culverted, sewage-scented 'creeks' and would no sooner eat one than we would kitty litter.'

'The river is now culverted beneath the largely Victorian town.'

'Talking to the engineers, environmentalists and politicians responsible, I realised that here, where council engineers want to culvert more of it, we are ten years behind the times.'

'Sprawl and malls are filling in the vacant lots and woodlands where we used to play; rivers and streams are culverted, channelized, and barren; and the coasts, lakesides, and mountains are spotted with trophy homes and locked gates.'

'Or it might have happened later, when the creek was culverted and the woods cut down to make way for subdivisions and shopping malls.'

'I have agreed details to culverting streams, adjacent to the M4 motorway, to allow the canal to be extended over these watercourses.'

'But since the city wants to use water diverted from Bradford Beck - which is culverted under the city centre - experts have been working on ways of making sure the river's quality is up to scratch.'

'She has happy recollections of childhood life in the area and the freedom to roam before rivers were culverted and open land was developed.'

'Of course, if I got my planning permission, I'd have to divert yon beck and culvert it away from your place.'

'And during the next 12 months up to six are likely to be

culverted and filled in.'

'The flood would not have occurred if the stream had not been culverted or if a culvert of sufficient size had been installed.'

'The plans include culverting part of Willowbeck and the agency has now withdrawn its objection, saying it is satisfied the development 'will not have a significant effect on flooding in Northallerton'.'

'Ironically, all that culverting work bounced back in his face, literally, for when we did have a heavy storm, the.overflow went the other way and flushed several thousand pounds' worth of rainbow trout into the beck.'

'He made his report following a motion that the stream be culverted.'

Origin

Late 13th century: of unknown origin.

Pronunciation

Early studies described these fish as a variety of the Arctic char, while later work declared them to be a separate species. For a long time, the bull trout was considered just a localized version of the Dolly Varden. Now many fisheries scientists believe that Dolly Varden and bull trout are two distinct species that look

amazingly similar. One thing is clear, though, as more of the puzzle surrounding these species unravels: these fish are reeling from a head-on collision with rampant human population growth and environmental damage, and are losing.

Historically, sport fishing regulations were liberal for bull trout and Dolly Varden. But in more recent years, as indications of fish abundance began to decline, more restrictive regulations were imposed.

Contact your local Washington Department of Fish and Wildlife regional office to find out which waters in your area are currently open to fishing for bull trout/Dolly Varden. Also consult the latest WDFW fishing regulations pamphlet.

Description

Bull trout and Dolly Varden can grow quite large, with typical adults reaching two to five pounds in Washington. The state record bull trout, caught from the Tieton River, weighed 22 pounds, 8 ounces, while the record Dolly Varden, taken from the Skykomish River, weighed 10 pounds.

Although closely resembling trout in body shape, char--which includes the imported brook trout and lake trout--can be distinguished from their relatives by their very fine scales and a reverse coloration. Char have dark-colored bodies with light spots while trout (such as rainbow and cutthroat) and Pacific salmon have light-colored bodies with dark spots.

Bull trout and Dolly Varden are difficult to distinguish from each other, even for specialists. Dolly Varden tend to have a more rounded body shape while bull trout have a larger, more flattened head and a more pronounced hook on the lower jaw. Some scientists

believe that one of the distinguishing characteristics of bull trout is that they do not migrate to saltwater. However, Washington biologists have recently found bull trout in Puget Sound.

Their color varies with habitat and locality, but the body is generally olive green, the back being darker than the pale sides; cream to pale yellow spots (slightly smaller than the pupil of the eye) cover the back, and red or orange spots cover the sides; and the pectoral, pelvic and anal fins have white or cream-colored margins. The male in full fall spawning dress sports a dark olive back, sometimes bordering on black, an orange-red belly, bright red spots and fluorescent white fin edges, rivaling fall's spectacular colors. Sea-run dollies are silvery and the spots may be very faint.

This unique coloration led to the common name Dolly Varden. Dolly Varden is a character in the Charles Dickens novel "Barnaby Rudge" who wears colorful clothing. This novel also led to the same name being given to a pink-spotted calico material that was popular at that time. Because the name is taken from a proper noun, Dolly Varden is one of the few species whose common name is capitalized in scientific literature.

Bull trout and Dolly Varden can be distinguished from eastern brook trout by the absence of vermiculations ("worm tracks") on their back. In addition, the eastern brook trout's red spots are surrounded by blue halos. To keep things interesting, though, bull trout and brook trout have been known to spawn together. Their hybrid offspring can have features of both parents. (Hybridization can be a serious problem in some areas, resulting in the dilution or destruction of the gene pool of the native bull trout.)

Range

Bull trout/Dolly Varden were historically found throughout the Pacific Northwest, from Northern California to the upper Yukon and Mackenzie drainages in Canada, as well as Siberia and Korea. Inland populations were found in Idaho, Montana, Utah, and Nevada. Bull trout may be extirpated in California, and have declined in numbers in much of their range.

Bull trout/Dolly Varden are found throughout Washington except the area east of the Columbia River and north of the Snake River in eastern Washington, and the extreme southwest portion of the state. The geographic ranges of bull trout and Dolly Varden overlap along the Washington coast and Puget Sound. Bull trout are found throughout the state, but Dolly Varden are found only in Western Washington. Bull trout have probably been extirpated from parts of their former range in Washington, such as Lake Chelan and the Okanogan River.

Habitat and Life History

Bull trout and Dolly Varden prefer deep pools of cold rivers, lakes, and reservoirs. Streams with abundant cover (cut banks, root wads, and other woody debris) and clean gravel and cobble beds provide the best habitat. Their preferred summer water temperature is generally less than 55 degrees Fahrenheit, while temperatures less than 40 degrees Fahrenheit are tolerated. Spawning during fall usually starts when water temperatures drop to the mid- to low-40s. Cold, clear water is required for successful reproduction.

Bull trout and Dolly Varden have complex, but similar life histories. Anadromous (sea-going) and migratory resident populations (for example, lake-dwelling stocks and main-stem rearing stocks) often journey long

distances in summer and fall, migrating to the small headwater streams where they hatched, to spawn. Mature adults with these characteristics are generally four to seven years old and 18 to 22 inches in length when they make their first spawning run.

The adults on their spawning runs can undergo some impressive journeys. Fish in the Skagit River system may travel more than 115 miles from the river mouth and ascend to an elevation of more than 3000 feet. The spawning area may be upstream of areas used by any other anadromous species.

Log jams, cascades and falls that are barriers to the chinook's brute strength and the steelhead's acrobatic abilities may be only minor obstacles to the cunning and guile of Dolly Varden and bull trout. While these char can jump remarkably well for fish their size, as much as seven or eight vertical feet under good conditions, they are just as likely to maneuver around a difficult spot. At a potential barrier they sometimes seem to be actively seeking alternative ways around it. Some go as far as to stick their heads out of the water to peek at the situation and find the easiest route.

Bull trout and Dolly Varden use headwater areas that typically are in pristine environments. Spawning begins in late August, peaking in September and October and ending in November. Fish in a given stream spawn over a short period of time; two weeks or less. The fish select clean, one- to three-inch gravel to construct their redds. Ideally, the female moves the smaller gravel away to expose the larger four- to eight-inch rocks below. Attended by several males, with the largest aggressively defending her and the redd, she deposits her eggs in the exposed spaces between the larger rocks and then buries the eggs with smaller gravel.

Almost immediately after spawning, adults begin to work their way back to the main-stem rivers, lakes or reservoirs to over-winter. Some of these fish stay put, others move on to salt water in the spring. Some survive the perils of the river to spawn a second or even third time. Kelts (spawned-out fish) feed aggressively to recover from the stress of spawning. This also happens to be the time when many anglers are searching the river for winter steelhead. Steelhead anglers must learn how to identify these fish and safely release them.

Newly-hatched fish emerge from the gravel the following spring. Those that migrate down to the main rivers, reservoirs and saltwater normally leave the headwater areas as two year olds. But complicating the picture even more are the resident stream populations that exhibit limited movements, living their entire lives in the same stretch of headwater stream. These fish may not mature until they are seven to eight years old, and rarely reach sizes greater than 14 inches in length. Biologists have observed these local residents spawning side-by-side with their much larger anadromous kin.

Bull trout and Dolly Varden are opportunistic feeders, eating aquatic insects, shrimp, snails, leeches, fish eggs and fish. Early beliefs that these fish are serious predators of salmon and steelhead (the state of Alaska once offered a bounty on them, believing that this would improve other salmonid populations) are generally not believed any longer. These native char are now beginning to get a reputation as highly-prized sport fish.

Population Status

While bull trout and Dolly Varden are more abundant in

the north Puget Sound area, statewide their populations are low and in some cases declining. In fact, the U.S. Fish and Wildlife Service (USFWS) recently determined that bull trout are at a moderate risk of extinction in five western states, including Washington. The USFWS found that listing the bull trout as threatened was warranted under the Federal Endangered Species Act on November 1, 1999. Dolly Varden are currently not listed under the Endangered Species Act.

The American Fisheries Society (an international organization of fisheries scientists) has classified bull trout as a "Fish of Special Concern." This means that biologists believe this species may become threatened or endangered by relatively minor disturbances to their habitat, and that additional information is needed to determine their status.

Habitat loss and over-harvest have both contributed to the decline of bull trout and Dolly Varden in Washington. Protection of spawning and juvenile rearing habitat (particularly the critical cold stream temperatures and clean spawning gravel), regulating harvest and controlling poaching are required in order to maintain or increase populations. The threat of global warming is especially alarming for bull trout and Dolly Varden because of limited areas with low enough temperatures for spawning.

Siltation and stream sedimentation are extremely harmful to the char's reproductive needs. Dollies and bull trout must have very clean gravel to spawn in. Destruction of stream-side vegetation through improper logging and agricultural activities increases siltation and stream temperatures, dealing a double blow to these fragile populations.

And if this isn't enough, Dolly Varden and bull trout face another threat from their cousin, the eastern brook trout. This non-native species can hybridize with both the Dollies and bull trout, effectively eliminating them from these areas.

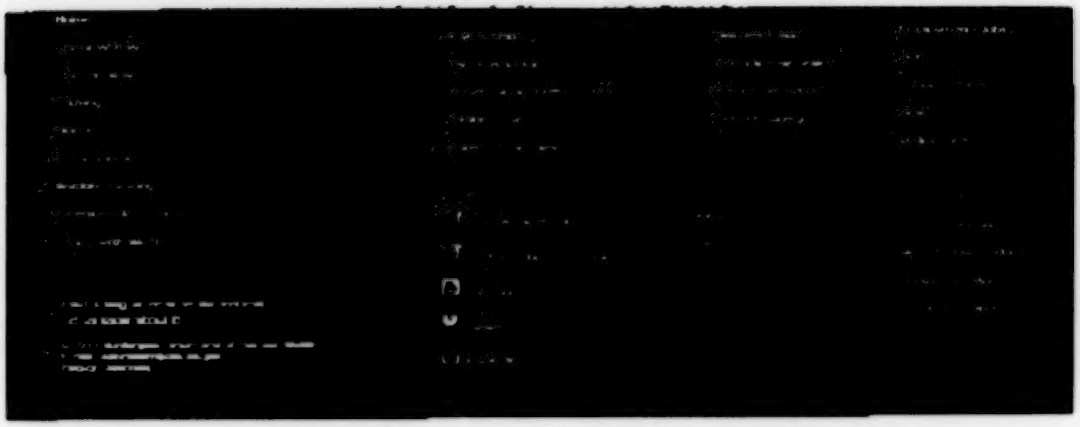
Management

While bull trout and Dolly Varden are currently classified as game fish in Washington, they have been red-flagged as a species of concern by the Washington Department of Fish and Wildlife (WDFW). They are a priority species under the WDFW Priority Habitats and Species Project.

Maintaining stream-side vegetation is essential for controlling stream temperatures and providing cover. Since very cold water and clear gravel are required for spawning and egg incubation, protecting streams that have this habitat feature is one of the critical elements in managing bull trout.

WDFW biologists are continuing to collect the required information to better understand bull trout and Dolly Varden, and are writing a new management plan for the species. In the meantime, newly implemented, restrictive sport fishing regulations will help protect our state's only native char for this and future generations.

With their requirements for cool water and clean gravel and the use of the whole river system at some time in their life history, Dolly Varden and bull trout are good indicators of the general health of the system. A decline in the number of Dollies and bull trout is a cause for concern not only for the fish but for people as well.



kiro7.com

SB 167 to be closed all weekend from Sumner to Auburn

EndPlay

2-3 minutes

Updated: Aug 19, 2016 - 4:46 PM

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PACIFIC, Wash. - Drivers who use southbound SR 167

near the city of Pacific will have to find another way around during a weekend closure.

The lanes will be shut down between Sumner and Auburn.

There will be detours in place, but officials warn they will be challenging.

Between 11 p.m. Friday and 5 a.m. Monday, all southbound lanes will be closed between Ellingston Road and 8th Street East. The 8th Street East off-ramp from southbound SR 167 will be closed as well.

>> WSDOT has provided a PDF document of the detour route.

>> See the South King Slowdown Calendar - August 19-22 with a map here

>> To see maps from previous weekends. click here

Over the weekend, crews plan to repave a mile of southbound SR 167, finalize the highway's permanent configuration, and install the west half of the Jovita Creek 368-foot fish-passable culvert that crosses under the southbound lanes of the freeway.

According to the News Tribune, the culvert project has to do with a court decision in a Federal lawsuit brought forward by Northwest tribes.

The News Tribune says an injunction in the case requires the Washington State Department of Transportation to rebuild poorly-designed culverts-pipes that carry water under roads--blocking salmon and steelhead trout from reaching spawning beds.

Nearly 1,000 culverts will have to be replaced statewide by 2030.

The other project is part of widening SR 167 to add a lane in the southbound direction and extend the existing high occupancy toll lanes system south on SR 167 in the Green River Valley.

Expanding the 9-mile SR 167 HOT lanes will connect King and Pierce County communities to employment hubs in the Puget Sound area.

Extending the southbound HOT lane from its existing end point at 37th Street NW in Auburn to 8th Street East in Pacific will reduce congestion and improve traffic flow and safety on SR 167, according to WSDOT.

The work on the addition of the lane will continue into the fall.

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FOR PUBLICATION

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

UNITED STATES OF AMERICA; SUQUAMISH INDIAN TRIBE; SAUK-SUIATTLE TRIBE; STILLAGUAMISH TRIBE; HOH TRIBE; JAMESTOWN S'KLALLAM TRIBE; LOWER ELWHA BAND OF KLALLAMS; PORT GAMBLE BAND CLALLAM; NISQUALLY INDIAN TRIBE; NOOKSACK INDIAN TRIBE; SKOKOMISH INDIAN TRIBE; SQUAXIN ISLAND TRIBE; UPPER SKAGIT INDIAN TRIBE; TULALIP TRIBES; LUMMI INDIAN NATION; QUINAULT INDIAN NATION; PUYALLUP TRIBE; CONFEDERATED TRIBES AND BANDS OF THE YAKAMA INDIAN NATION; QUILEUTE INDIAN TRIBE; MAKAH INDIAN TRIBE; SWINOMISH INDIAN TRIBAL COMMUNITY; MUCKLESHOOT INDIAN TRIBE, *Plaintiffs-Appellees,* v. STATE OF WASHINGTON, *Defendant-Appellant.*	No. 13-35474 D.C. Nos. 2:01-sp-00001-RSM 2:70-cv-09213-RSM ORDER AND AMENDED OPINION

Appeal from the United States District Court for the Western District of Washington

Ricardo S. Martinez, Chief District Judge, Presiding

Argued and Submitted October 16, 2015
Seattle, Washington

Filed June 27, 2016

Amended March 2, 2017

Before: William A. Fletcher and Ronald M. Gould, Circuit Judges, and David A. Ezra,* District Judge.

Opinion by Judge W. Fletcher

SUMMARY**

Tribal Fishing Rights

The panel amended the opinion filed on June 27, 2016; and affirmed the district court's order issuing an injunction directing the State of Washington to correct culverts, which allow streams to flow underneath roads, because they violated, and continued to violate, the Stevens Treaties, which were entered in 1854–55 between Indian tribes in the Pacific Northwest and the Governor of Washington Territory.

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* The Honorable David A. Ezra, District Judge for the U.S. District Court for the District of Hawai'i, sitting by designation.

** This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

As part of the Treaties, the Tribes relinquished large swaths of land, watersheds, and offshore waters adjacent to those areas (collectively, the "Case Area"), in what is now the State of Washington. In exchange, the Tribes were guaranteed a right to engage in off-reservation fishing.

In 1970, the United States brought suit against the State of Washington on behalf of the Tribes to resolve a persistent conflict over fishing rights; and in a 1974 decision, the district court authorized the parties to invoke its continuing jurisdiction to resolve continuing disputes.

The panel held that in building and maintaining barrier culverts within the Case Area, Washington violated, and was continuing to violate, its obligation to the Tribes under the Treaties. The panel also held that because treaty rights belong to the Tribes rather than the United States, it was not the prerogative of the United States to waive them.

Concerning the State of Washington's cross-request seeking an injunction that would require the United States to fix its culverts before Washington repaired its culverts, the panel held that Washington's cross-request was barred by sovereign immunity, and Washington did not have standing to assert any treaty rights belonging to the Tribes. Specifically, the panel held that Washington's cross-request for an injunction did not qualify as a claim for recoupment. The panel also held that the United States did not waive its own sovereign immunity by bringing suit on behalf of the Tribes. The panel further held that any violation of the Treaties by the United States violated rights held by the Tribes

rather than the State, and the Tribes did not seek redress against the United States in this proceeding.

The panel held that the district court did not abuse its discretion in enjoining Washington to correct most of its high-priority barrier culverts within seventeen years, and to correct the remainder at the end of their natural life or in the course of a road construction project undertaken for independent reasons. The panel rejected Washington's objections that the injunction was too broad, that the district court did not defer to the State's expertise, that the court did not properly consider costs and equitable principles, that the injunction impermissibly intruded into state government operations, and that the injunction was inconsistent with federalism principles.

Addressing the State of Washington's petition for panel rehearing and for rehearing en banc, the panel rejected Washington's argument that it should have been awarded, as recoupment or set-off, a monetary award from the United States. The panel also rejected Washington's contention that because of the presence of non-state-owned barrier culverts on the same streams as state-owned barrier culverts, the benefits obtained from remediation of state-owned culverts would be insufficient to justify the district court's injunction.

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Dominic M. Carollo, Yockim Carollo LLP, Roseburg, Oregon, for Amici Curiae Klamath Critical Habitat Landowners Inc., Modoc Point Irrigation District, Mosby Family Trust, Sprague River Water Resource Foundation Inc., and TPC LLC.

ORDER

The opinion filed on June 27, 2016 is amended as follows:

At 855 of the published opinion, *U.S. v. Washington*, 827 F.3d 836 (9th Cir. 2016), add the following subheading beneath "C. Washington's Cross-Request":

"1. Injunction."

On the same page, add "for an injunction" following "The district court struck the cross request . . . ".

At 855–56, change the numbering of the subheadings of "Sovereign Immunity" and "Standing" from 1, 2 to a, b.

At 856, just above subsection D, add the following text:

2. Recoupment of Part of Washington's Costs

In its Petition for Panel Rehearing and for Rehearing En Banc, filed after our opinion came down, *see United States v. Washington*, 827 F.3d 836 (9th Cir. 2016), Washington contends that we misconstrued its appeal of the district court's denial of its cross-request. Washington writes in its Petition:

> The State's original [cross-request] sought a variety of remedies, including that the federal government be required to (1) pay part of the cost of replacing state culverts that were designed to federal standards; (2) take actions on federal lands to restore salmon runs; and (3) replace federal culverts in Washington. But on appeal, the State pursued only the first of these remedies.

We did not, and do not, so understand the State's appeal. Contrary to Washington's statement, it did appeal the district court's denial of its cross-request for an injunction requiring the United States to repair or replace the United States' own barrier culverts. It did not appeal a denial of a request that the United States be required to pay part of its costs to repair or replace its culverts.

In the district court, Washington stated in the body of its cross-request that "[t]he United States has a duty to pay all costs incurred by the State to identify

and fix any and all barrier culverts." But in its demand for relief, Washington did not demand any monetary payment from the United States, unless its boilerplate request ("The State of Washington further requests all other relief the Court deems just and equitable") could be deemed such a demand. Not surprisingly, in denying Washington's cross-request, the district court did not discuss a demand for monetary payment from the United States. In its brief to us, Washington writes in the introduction that the district court erred in denying its request to allow the State "to recoup some of the costs of compliance from the United States because it specified the culvert design and caused much of the decline in the salmon runs." But Washington makes no argument in the body of its brief that it should be allowed to recover from the United States any part of the cost to repair or replace its own barrier culverts.

When considering Washington's appeal, we did not understand it to argue that it should have been awarded, as recoupment or set-off, a monetary award from the United States. Given Washington's failure to make this argument in the body of its brief, the argument was waived. *Smith v. Marsh*, 194 F.3d 1045, 1052 (9th Cir. 1999). However, given the vigor with which Washington now makes the argument in its Petition for Rehearing and Rehearing En Banc, we think it appropriate to respond on the merits.

Washington's argument is easily rejected. As recounted above, a claim for recoupment must, *inter alia*, "seek relief of the same kind or nature as the plaintiff's suit." *Berrey*, 439 F.3d at 645. Washington's claim does not satisfy this criterion. The United States, the plaintiff, sought injunctive relief against

Washington. Washington sought a monetary award. These two forms of relief are not "of the same kind or nature."

At 859, just prior to the paragraph beginning, "Witnesses at trial. . .", add the following text:

The State contends that because of the presence of non-state-owned barrier culverts on the same streams as state-owned barrier culverts, the benefit obtained from remediation of state-owned culverts will be insufficient to justify the district court's injunction. The State writes:

> [S]tate-owned culverts are less than 25% of all known barrier culverts, and in some places, non-state culverts outnumber state-owned culverts by a factor of 36 to 1. Any benefit from fixing a state-owned culvert will not be realized if fish are blocked by other culverts in the same stream system.

There are several answers to the State's contention. First, it is true that in calculating whether a state culvert is a barrier culvert, and in determining the priority for requiring remediation, the court's injunction ignores non-state barriers on the same stream. But in so doing, the court followed the practice of the state itself. Paul Sekulich, formerly division manager in the restoration division in the habitat program of the Washington Department of Fish and Wildlife ("WDFW"), testified in the district court:

> Q: When you calculate a priority index number for a [state-owned] culvert, do you account for the presence of other fish passage barriers in a watershed?

> A: . . . When the priority index is calculated, it treats those other barriers as transparent. The reason we do that, we don't know when those other barriers are being corrected. So by treating them as transparent, you do a priority index that looks at potential habitat gain as if all those barriers would be corrected at some point in time.

Washington State law requires that a "dam or other obstruction across or in a stream" be constructed in such a manner as to provide a "durable and efficient fishway" allowing passage of salmon. Wash. Rev. Code § 77.57.030(1). If owners fail to construct or maintain proper fishways, the Director of WDFW may require them do so at their own expense. *Id.* at § 77.57.030(2).

Second, in 2009, on streams where there were both state and non-state barriers, 1,370 of the 1,590 non-state barriers, or almost ninety percent, were upstream of the state barrier culverts. Sixty nine percent of the 220 downstream non-state barriers allowed partial passage of fish. Of the 152 that allowed partial passage, "passability" was 67% for 80 of the barriers and 33% for 72 of them.

Third, the specific example provided by the state is a culvert on the Middle Fork of Wildcat Creek under State Route 8 in Grays Harbor County. The State is correct that there are 36 non-state barriers and only one state barrier culvert on this creek. The State fails to mention, however, that all of the non-state barriers are upstream of the state culvert. Further, it is apparent from the map in the district court record that the nearest non-state barrier is almost a half mile upstream.

No new Petition for Panel Rehearing or Petition for Rehearing en Banc will be entertained. Pending petitions remain pending and need not be renewed.

OPINION

W. FLETCHER, Circuit Judge:

In 1854 and 1855, Indian tribes in the Pacific Northwest entered into a series of treaties, now known as the "Stevens Treaties," negotiated by Isaac I. Stevens, Superintendent of Indian Affairs and Governor of Washington Territory. Under the Stevens Treaties ("Treaties") at issue in this case, the tribes relinquished large swaths of land west of the Cascade Mountains and north of the Columbia River drainage area, including the Puget Sound watershed, the watersheds of the Olympic Peninsula north of the Grays Harbor watershed, and the offshore waters adjacent to those areas (collectively, the "Case Area"), in what is now the State of Washington. In exchange for their land, the tribes were guaranteed a right to off-reservation fishing, in a clause that used essentially identical language in each treaty. The "fishing clause" guaranteed "the right of taking fish, at all usual and accustomed grounds and stations . . . in common with all citizens of the Territory."

In 2001, pursuant to an injunction previously entered in this long-running litigation, twenty-one Indian tribes ("Tribes"), joined by the United States, filed a "Request for Determination" — in effect, a complaint — in the federal district court for the Western District of Washington. The Tribes include the Suquamish Indian Tribe, Jamestown S'Klallam,

Lower Elwha Band of Klallams, Port Gamble Clallam, Nisqually Indian Tribe, Nooksack Tribe, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Upper Skagit Tribe, Tulalip Tribes, Lummi Indian Nation, Quinault Indian Nation, Puyallup Tribe, Hoh Tribe, Confederated Tribes and Bands of the Yakama Indian Nation, Quileute Indian Tribe, Makah Indian Tribe, Swinomish Indian Tribal Community, and the Muckleshoot Indian Tribe. The Tribes contended that Washington State ("Washington" or "the State") had violated, and was continuing to violate, the Treaties by building and maintaining culverts that prevented mature salmon from returning from the sea to their spawning grounds; prevented smolt (juvenile salmon) from moving downstream and out to sea; and prevented very young salmon from moving freely to seek food and escape predators. In 2007, the district court held that in building and maintaining these culverts Washington had caused the size of salmon runs in the Case Area to diminish and that Washington thereby violated its obligation under the Treaties. In 2013, the court issued an injunction ordering Washington to correct its offending culverts.

We affirm the decision of the district court.

I. Historical Background

For over a hundred years, there has been conflict between Washington and the Tribes over fishing rights under the Treaties. We recount here some of the most salient aspects of this history.

When white settlers arrived in the Washington territory in the second half of the nineteenth century, many settled on riparian land and salt-water

shoreline. Even though the majority of these settlers were not themselves fishermen, they blocked access to many of the Tribes' traditional fishing sites. By the end of the century, white commercial fishermen were catching enormous quantities of salmon, first on the Columbia River and then in Puget Sound as well, supplying large-scale canneries.

In 1894, L. T. Erwin, the United States Indian Agent for the Yakimas, complained that whites had blocked access to the Indians' "accustomed fisheries" on the Columbia River: "[I]nch by inch, [the Indians] have been forced back until all the best grounds have been taken up by white men, who now refuse to allow them to fish in common, as the treaty provides." *Report of the Secretary of the Interior, 1894* (3 vols., Washington, D.C., 1894, II, 326). In 1897, D. C. Govan, the Indian Agent for the Tulalips on Puget Sound reported that "the Alaska Packing Company and other cannery companies have practically appropriated all the best fishing grounds at Point Roberts and Village Point, where the Lummi Indians have been in the habit of fishing from time immemorial." *Annual Reports of the Department of the Interior, 1897: Report of the Commissioner of Indian Affairs* (Washington, D.C., 1897, 297). In 1905, Charles Buchanan, the new Indian Agent for the Tulalips, complained, "The tremendous development of the fisheries by traps and by trust methods of consolidation, concentration, and large local development are seriously depleting the natural larders of our Indians and cutting down their main reliance for support and subsistence. Living for them is becoming more precarious year by year." *Annual Reports of the Department of the Interior, 1905: Indian*

Affairs (Washington, D.C., 1906, Part I, 362). During this period, "[t]he superior capital, large-scale methods, and aggressiveness of whites . . . quickly led to their domination of the prime fisheries of the region." Donald L. Parman, *Inconstant Advocacy: The Erosion of Indian Fishing Rights in the Pacific Northwest*, 53 Pacific Hist. Rev. 163, 167 (1984).

The United States Supreme Court first addressed the conflict over fisheries in *United States v. Winans*, 198 U.S. 371 (1905). The Winans brothers had acquired land at a prime Yakima fishing site on the Washington side of the Columbia River. *See* Michael C. Blumm and James Brunberg, *'Not Much Less Necessary . . . Than the Atmosphere They Breathed': Salmon, Indian Treaties, and the Supreme Court — a Centennial Remembrance of* United States v. Winans *and Its Enduring Significance*, 46 Nat. Resources J. 489, 523 (2006). Under an exclusive license from the State, the Winanses operated "fish wheels" at the site. Fish wheels were essentially mechanized dip nets "capable of catching salmon by the ton." *Washington v. Wash. State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 679 (1979). The Winanses refused to allow the Yakimas to cross over or to camp on their land in order to fish at the site.

The Yakimas had signed one of the Stevens Treaties in 1855. The United States brought suit against the Winanses on the Yakimas' behalf. The Supreme Court held that the land owned by the Winanses, previously conveyed by patent from the government, was by virtue of the treaty subject to an easement allowing access to the Yakimas' "usual and accustomed" fishing site. The Court held, further, that

the State could not license the Winanses to "construct and use a device which gives them exclusive possession of the fishing places, as it is admitted a fish wheel does." *Winans*, 198 U.S. at 382. *See also Seufort Bros. Co. v. United States*, 249 U.S. 194 (1919) (holding that the Yakimas had rights under the treaty on the Oregon, as well as the Washington, side of the river).

In 1915, Charles Buchanan, still the Indian Agent for the Tulalips, complained to the Washington legislature of the diminished supply of salmon and the harsh application of Washington's fish and game laws against the Indians. He wrote:

> [M]ore recently, the use of large capital, mechanical assistance, numerous great traps, canneries, etc., and other activities allied to the fishery industry, have greatly lessened and depleted the Indians' natural sources of food supply. In addition thereto the stringent and harsh application to Indians of the State game and fish laws have made it still and increasingly precarious for him to procure his natural foods in his natural way.

Rights of the Puget Sound Indians to Game and Fish, 6 Wash. Hist. Quart. 109, 110 (Apr. 1915).

The next year, the Washington Supreme Court upheld the sort of "stringent and harsh application . . . of game and fish laws" of which Buchanan complained. In *State v. Towessnute*, 154 P. 805, 806 (Wash. 1916), a member of the Yakima Nation named Towessnute was charged with off-reservation fishing without a license in a manner forbidden by state law. Towessnute defended on the ground that he was

fishing in the traditional manner at one the Yakimas' usual and accustomed places, and that he was entitled to do so under the treaty at issue in *Winans*. *Id.* Characterizing the treaty as a "dubious document," *id.*, the Washington Supreme Court rejected the defense:

> The premise of Indian sovereignty we reject. The treaty is not to be interpreted in that light. At no time did our ancestors in getting title to this continent, ever regard the aborigines as other than mere occupants . . . of the soil.

Id. at 807. The Court read the Supreme Court's holding in *Winans* as requiring easements across private land, but at the same time as endorsing the authority of the state, through the exercise of its "police power," to enact regulatory laws restricting Indian fishing rights. *Id.* at 809. *See also State v. Alexis*, 154 P. 810 (Wash. 1916) (holding the same under the Stevens Treaty with the Lummi Tribe in Puget Sound).

Much traditional Indian fishing was done with traps and nets in rivers, catching mature salmon when they returned to their native habitat to spawn. White commercial fishermen, by contrast, often fished in salt water, using equipment that most Indians could not afford and catching both mature and immature salmon. Beginning in the early 1900s, the State regulated the salmon fishery in Puget Sound in such a way that Indians who fished in rivers were increasingly unable to exercise their off-reservation treaty right to fish in their usual and accustomed places and in their traditional manner. For example, in 1907 the Washington legislature forbade all off-

reservation fishing above the tide line — by whites and Indians alike — except by hook and line. Wash. Sess. Laws Ch. 247, Sec. 2 (1907).

In 1934, Washington voters adopted Initiative 77, a measure that limited off-reservation commercial fishing to certain portions of Puget Sound and banned the use of fixed gear, such as the "pound net, fish trap, fish wheel, scow fish wheel, set net, or any fixed appliance," to catch salmonids. Init. Measure No. 77, State of Wash. Voting Pamphlet 5 (Nov. 6, 1934). According to a report commissioned by the federal Bureau of Indian Affairs, the passage of Initiative 77 "constituted a serious blow to the Indian fishing being carried on at usual and accustomed grounds":

> [D]ue to their extremely limited financial means, [the Indians'] gear necessarily must be obtainable at a minimum of expense. Generally speaking, the Indians are unable to finance the purchase of other more expensive gear and operating equipment, the use of which was not entirely outlawed. In order to continue to provide the necessities of life, the Indians, as a result of the above conservation statute, were literally forced to confine their fishing with such gear to reservation waters. The fact that such was the situation led to considerable agitation in the Pacific Northwest and especially in the [S]tate of Washington looking to the further curtailment of the Indians' commercial fishery.

Edward Swindell, *Report on Source, Nature and Extent of Fishing, Hunting, and Miscellaneous*

Rights of Certain Indian Tribes in Washington and Oregon 95 (1942).

In subsequent years, the State continued to assert authority to regulate off-reservation fishing by Indians, including authority to require purchase of fishing licences. In 1939, Sampson Tulee, a Yakima Indian, was criminally charged with off-reservation commercial fishing with a dip net on the Columbia River without a state license. Citing *Towessnute* and *Alexis*, the Washington Supreme Court affirmed the conviction as a valid exercise of the State's police powers. *Washington v. Tulee*, 109 P.2d 280, 287 (Wash. 1941) ("Washington enjoys to the full the exercise of its police powers."). The United States Supreme Court reversed. The Court held that while the State had the power, consistent with the treaty, to regulate fishing by both Indians and non-Indians to the degree "necessary for the conservation of fish," the exaction of a license fee "cannot be reconciled with a fair construction of the treaty." *Tulee v. Washington*, 315 U.S. 681, 684–85 (1942).

After *Tulee*, state officials continued to enforce restrictions on off-reservation fishing by Puget Sound Indians, even when that fishing was conducted at the Indians' usual and accustomed places:

> Over the years the state fish and game authorities have asserted that Indian treaty-protected fishing exists only on the reservations, and have acted to enforce this position. Injunctions against off-reservation fishing by Indians of the Nisqually, Puyallup, and Muckleshoot tribes have been obtained and enforcement actions carried out even while the

> injunctions are being contested in the courts. Arrests of fishermen and confiscation of gear have seriously hampered the Indians. Valuable gear held by the state as evidence can effectively put the fisherman out of business during several runs of fish, even though he may eventually win his case.

Walter Taylor, *Uncommon Controversy: Fishing Rights of the Muckleshoot, Puyallup, and Nisqually Indians* 60 (1970). As a result of the State's hostility to off-reservation fishing, the Indians' share of the overall catch was relatively small. For example, from 1958 through 1967, the shares of the total salmon catch in Puget Sound were 6% for Indian fishing, 8.5% for sports fishing, and 85.5% for commercial fishing. *Id.* at 123, 126.

Beginning in the early 1960s, the State substantially increased its enforcement against off-reservation fishing in Puget Sound. *See generally* Bradley G. Shreve, *"From Time Immemorial": The Fish-in Movement and the Rise of Intertribal Activism*, 78 Pacific Hist. Rev. 403, 411–15 (2009). In response, in 1964 the National Indian Youth Council organized a large demonstration in Olympia to demand that the State acknowledge their treaty fishing rights. *See Uncommon Controversy*, *supra*, at 107–13. During the 1960s and early 1970s, in what came to be called the "fish wars," some Indians fished openly and without licenses in "fish-ins" to bring attention to the State's prohibitions against off-reservation fishing. State reaction to the "fish-ins" sometimes led to violence. *See, e.g.*, Associated Press, "Shots Fired, 60 Arrested in Indian-Fishing Showdown," *Seattle Times*, Sept. 9, 1970; Alex Tizon, "The Boldt Decision / 25 Years —

The Fish Tale That Changed History," *Seattle Times*, Feb. 7, 1999 (describing the State's "military-style campaign," employing "surveillance planes, high-powered boats and radio communications," as well as "tear gas," "billy clubs," and "guns").

In 1970, in an effort to resolve the persistent conflict between the State and the Indians, the United States brought suit against the State on behalf of the Tribes. The dispute now before us is part of that litigation.

II. Anadromous Fisheries and Washington's Barrier Culverts

Anadromous fish, such as salmon, hatch and spend their early lives in fresh water, migrate to the ocean to mature, and return to their waters of origin to spawn. Washington is home to several anadromous fisheries, of which the salmon fishery is by far the most important. Before the arrival of white settlers, returning salmon were abundant in the streams and rivers of the Pacific Northwest. Present-day Indian tribes in the Pacific Northwest eat salmon as an important part of their diet, use salmon in religious and cultural ceremonies, and fish for salmon commercially.

Roads often cross streams that salmon and other anadromous fish use for spawning. Road builders construct culverts to allow the streams to flow underneath roads, but many culverts do not allow fish to pass easily. Sometimes they do not allow fish passage at all. A "barrier culvert" is a culvert that inhibits or prevents fish passage. Road builders can avoid constructing barrier culverts by building roads away from streams, by building bridges that entirely

span streams, or by building culverts that allow unobstructed fish passage.

Four state agencies are responsible for building and managing Washington's roads and the culverts that pass under them: Washington State Department of Transportation ("WSDOT"), Washington State Department of Natural Resources ("WSDNR"), Washington State Parks and Recreation Commission ("State Parks"), and Washington Department of Fisheries and Wildlife ("WDFW"). Of these, WSDOT, the agency responsible for Washington's highways, builds and maintains by far the most roads and culverts.

III. Earlier Proceedings

In 1970, the United States, on its own behalf and as trustee for Pacific Northwest tribes, sued Washington in federal court in the Western District of Washington. The United States sought declaratory and injunctive relief based on the fishing clause of the Treaties. *United States v. State of Washington*, 384 F. Supp. 312, 327–28 (W.D. Wash. 1974) ("*Washington I*"). In what has come to be known as the "Boldt decision," District Judge George H. Boldt divided the case into two phases. Phase I was to determine what portion, if any, of annually harvestable fish were guaranteed to the Tribes by the fishing clause. Phase II was to determine whether the fishing clause extends to hatchery fish, and whether it requires Washington to prevent environmental degradation within the Case Area.

In Phase I, Judge Boldt held that the phrase "the right of taking fish . . . in common with all citizens" gives the Tribes the right to take up to fifty

percent of the harvestable fish in the Case Area, subject to the right of non-treaty fishers to do the same. *Id.* at 343. The Supreme Court affirmed in *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658 (1979) ("*Fishing Vessel*"). The Court specified that fifty percent was a ceiling rather than a floor, and that the fishing clause guaranteed "so much as, but no more than, is necessary to provide the Indians with a livelihood—that is to say, a moderate living." *Id.* at 686. In accordance with its standard practice of interpreting Indian treaties in favor of the tribes, the Court interpreted the clause as promising protection for the tribes' supply of fish, not merely their share of the fish. The Court wrote:

> Governor Stevens and his associates were well aware of the "sense" in which the Indians were likely to view assurances regarding their fishing rights. During the negotiations, the vital importance of the fish to the Indians was repeatedly emphasized by both sides, and the Governor's promises that the treaties would protect that source of food and commerce were crucial in obtaining the Indians' assent.

Id. at 676.

In 1976, the United States initiated Phase II of the litigation, asking for a declaratory judgment clarifying the Tribes' rights with respect to the "hatchery fish" issue and to the "environmental" issue. *United States v. State of Washington*, 506 F. Supp. 187, 194 (W.D. Wash. 1980) ("*Washington II*"). The district court held, first, that hatchery fish must be included in determining the share of fish to which the

Tribes are entitled. *Id.* at 197. It held, second, that the Tribes' right to "a sufficient quantity of fish to satisfy their moderate living needs" entailed a "right to have the fishery habitat protected from man-made despoliation." *Id.* at 208, 203.

Sitting en banc, we affirmed in part and vacated in part. *United States v. State of Washington*, 759 F.2d 1353 (9th Cir. 1985) (en banc) ("*Washington III*"). We affirmed the district court's decision that hatchery fish must be included in determining the share of salmon to be allocated to the Tribes: .

> The hatchery programs have served a mitigating function since their inception in 1895. They are designed essentially to replace natural fish lost to non-Indian degradation of the habitat and commercialization of the fishing industry. Under these circumstances, it is only just to consider such replacement fish as subject to treaty allocation. For the tribes to bear the full burden of the decline caused by their non-Indian neighbors without sharing the replacement achieved through the hatcheries, would be an inequity and inconsistent with the Treaty.

Id. at 1360 (citations omitted).

We vacated the court's decision on the environmental issue. We held that the issue was too broad and varied to be resolved in a general and undifferentiated fashion, and that the issue of human-caused environmental degradation must be resolved in the context of particularized disputes. We wrote:

> We choose to rest our decision in this case on the proposition that issuance of the declaratory judgment on the environmental issue is contrary to the exercise of sound judicial discretion. The legal standards that will govern the State's precise obligations and duties under the treaty with respect to the myriad State actions that may affect the environment of the treaty area will depend for their definition and articulation upon concrete facts which underlie a dispute in a particular case.

Id. at 1357. Although we vacated the district court's decision with respect to the environmental issue, we made clear that we were not absolving Washington of environmental obligations under the fishing clause. We concluded the section of our opinion devoted to the environmental issue by emphasizing that Washington "is bound by the treaty." *Id.*

Judge Boldt's 1974 decision authorized the parties to invoke the continuing jurisdiction of the district court to resolve disputes "concerning the subject matter of this case." *Washington I*, 384 F. Supp. at 419; *see also United States v. Washington*, 573 F.3d 701, 705 (9th Cir. 2009). For such disputes, the court directed the parties to "file with the clerk of this court . . . a 'Request for Determination' setting forth the factual nature of the request and any legal authorities and argument which may assist the court, along with a statement that unsuccessful efforts have been made by the parties to resolve the matter, whether a hearing is required, and any factors which bear on the urgency of the request." *Washington I*, 384 F. Supp. at 419.

In 2001, the Tribes filed a Request for Determination ("Request"), seeking "to enforce a duty upon the State of Washington to refrain from constructing and maintaining culverts under State roads that degrade fish habitat so that adult fish production is reduced." The Tribes sought a permanent injunction from the district court "requiring Washington to identify and then to open culverts under state roads and highways that obstruct fish passage, for fish runs returning to or passing through the usual and accustomed grounds and stations of the plaintiff tribes."

The United States joined the Tribes' Request, seeking a declaration from the court that:

> The right of taking fish secured to the plaintiff tribes in the Stevens Treaties imposes a duty upon the State of Washington to refrain from degrading the fishery resource through the construction or maintenance of culverts under State owned roads and highways in a way that deprives the Tribes of a moderate living from the fishery.
>
> The State has violated and continues to violate the duty owed to the plaintiff tribes under the Stevens Treaties through the operation and maintenance of culverts which reduce the number of fish that would otherwise return to or pass through the Tribes' usual and accustomed fishing grounds and stations to such a degree as would deprive the Tribes of the ability to earn a moderate living from the fishery.

The United States sought a permanent injunction that would require Washington "within five years of the date of judgment (or such other time period as the Court deems necessary and just)" to "repair, retrofit, maintain, or replace" culverts that "degrade appreciably" the passage of fish.

Washington and the defendant state agencies (collectively "Washington" or "the State") answered by declaring that there is "no treaty-based right or duty of fish habitat protection as described" in the Request. In the alternative, Washington emphasized that some of its barrier culverts pass under highways funded in part by the United States, and that these highways were "designed according to standards set or approved" by the Federal Highway Administration, leading Washington to believe that its culverts complied with the Treaties. Further, Washington asserted that the United States and the Tribes have built and maintained barrier culverts on their own lands within the Case Area. Washington asserted that the United States "has a duty to take action on its own lands so as not to place on the State of Washington an unfair burden of complying with any such treaty-based duty."

Washington also made a "cross-request" — in effect, a counterclaim — against the United States seeking a declaration that the United States has violated its own duty to the Tribes under the Treaties, and seeking an injunction that would require the United States to modify or replace its own barrier culverts.

The district court dismissed the cross- request on the ground that the United States had not waived

its sovereign immunity. The court later denied Washington's request to file an amended cross-request on the additional ground that Washington did not have standing. It wrote, "[T]he State may not assert a treaty-based claim on behalf of the Tribes. . . . The decision as whether and when to assert that claim against the United States is for the Tribes alone."

The district court granted summary judgment in favor of the Tribes and the United States, concluding that the dispute involved the kind of "concrete facts" that were lacking in *Washington III*. The court held, first, that "the right of taking fish, secured to the Tribes in the Stevens Treaties, imposes a duty upon [Washington] to refrain from building or operating culverts under State-maintained roads that hinder fish passage and thereby diminish the number of fish that would otherwise be available for Tribal harvest." It held, second, that "the State of Washington currently owns and operates culverts that violate this duty."

The district court conducted a bench trial in 2009 and 2010 to determine the appropriate remedy. After failed efforts to reach a settlement, the court issued both a Memorandum and Decision and a Permanent Injunction. In its Memorandum and Decision, issued in 2013, the court found that Governor Stevens had assured the Tribes that they would have an adequate supply of salmon forever. The court wrote:

> During the negotiations leading up to the signing of the treaties, Governor Isaac Stevens and other negotiators assured the Tribes of

> their continued access to their usual fisheries. *Governor Stevens assured the Tribes that even after they ceded huge quantities of land, they would still be able to feed themselves and their families forever. As Governor Stevens stated, "I want that you shall not have simply food and drink now but that you may have them forever."*

(Emphasis added.)

The court found that salmon stocks in the Case Area have declined "alarmingly" since the Treaties were signed, and "dramatically" since 1985. The court wrote, "A primary cause of this decline is habitat degradation, both in breeding habitat (freshwater) and feeding habitat (freshwater and marine areas) . . . . One cause of the degradation of salmon habitat is . . . culverts which do not allow the free passage of both adult and juvenile salmon upstream and downstream." The "consequent reduction in tribal harvests has damaged tribal economies, has left individual tribal members unable to earn a living by fishing, and has caused cultural and social harm to the Tribes in addition to the economic harm."

The district court entered a Permanent Injunction on the same day it issued its Memorandum and Decision. The court ordered the State, in consultation with the Tribes and the United States, to prepare within six months a current list of all state-owned barrier culverts within the Case Area. It ordered WSDNR, State Parks, and WDFW to correct all their barrier culverts on the list by the end of October 2016. It ordered WSDOT to correct many of its barrier culverts within seventeen years, and to correct the remainder only at the end of the culverts'

natural life or in connection with independently undertaken highway projects. We provide a more detailed description of the injunction below.

IV. Standard of Review

We review de novo dismissals for want of jurisdiction under Rule 12(b)(1) and for failure to state a claim under Rule 12(b)(6). *Rhoades v. Avon Products, Inc.*, 504 F.3d 1151, 1156 (9th Cir. 2007). We also review de novo a grant or denial of summary judgment. *Scott v. Pasadena Unified Sch. Dist.*, 306 F.3d 646, 652 (9th Cir. 2002). We review permanent injunctions under three standards: we review factual findings for clear error, legal conclusions de novo, and the scope of the injunction for abuse of discretion. *Id.* at 653.

V. Discussion

Washington objects to the decision of the district court on a number of grounds. It objects to the court's interpretation of the Stevens Treaties, contending that it has no treaty-based duty to refrain from building and maintaining barrier culverts; to the overruling of its waiver defense; to the dismissal of its cross-request against the United States; and to the injunction. We take the State's objections in turn.

A. Washington's Duty under the Treaties

The fishing clause of the Stevens Treaties guarantees to the Tribes a right to engage in off-reservation fishing. It provides, in its entirety:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory, and of erecting

> temporary houses for the purpose of curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands: *Provided, however,* That they shall not take shell fish from any beds staked or cultivated by citizens.

Fishing Vessel, 443 U.S. at 674 (emphasis in original). Washington concedes that the clause guarantees to the Tribes the right to take up to fifty percent of the fish available for harvest, but it contends that the clause imposes no obligation on the State to ensure that any fish will, in fact, be available.

In its brief to us, Washington denies any treaty-based duty to avoid blocking salmon-bearing streams:

> [T]he Tribes here argue for a treaty right that finds no basis in the plain language or historical interpretation of the treaties. On its face, the right of taking fish in common with all citizens does not include a right to prevent the State from making land use decisions that could incidentally impact fish. Rather, such an interpretation is contrary to the treaties' principal purpose of opening up the region to settlement.

Brief at 27–28. At oral argument, Washington even more forthrightly denied any treaty-based duty. Washington contended that it has the right, consistent with the Treaties, to block every salmon-bearing stream feeding into Puget Sound:

> The Court: Would the State have the right, consistent with the treaty, to dam every salmon stream into Puget Sound?
>
> Answer: Your honor, we would never and could never do that. . . .
>
> The Court: . . . I'm asking a different question. Would you have the right to do that under the treaty?
>
> Answer: Your honor, the treaty would not prohibit that[.]
>
> The Court: So, let me make sure I understand your answer. You're saying, consistent with the treaties that Governor Stevens entered into with the Tribes, you could block every salmon stream in the Sound?
>
> Answer: Your honor, the treaties would not prohibit that[.]

Oral Argument at 1:07–1:45, October 16, 2015.

The State misconstrues the Treaties.

We have long construed treaties between the United States and Indian tribes in favor of the Indians. Chief Justice Marshall wrote in the third case of the Marshall Trilogy, "The language used in treaties with the Indians should never be construed to their prejudice." *Worcester v. Georgia*, 31 U.S. 515, 582 (1832). "If words be made use of which are susceptible of a more extended meaning than their plain import, as connected with the tenor of the treaty, they should be considered as used only in the latter sense." *Id.*

Negotiations for the Stevens Treaties were conducted in the Chinook language, a trading jargon

of only about 300 words. *Fishing Vessel*, 443 U.S. at 667 n.10. The Treaties were written in English, a language the Indians could neither read nor write. Because treaty negotiations with Indians were conducted by "representatives skilled in diplomacy," because negotiators representing the United States were "assisted by . . . interpreter[s] employed by themselves," because the treaties were "drawn up by [the negotiators] and in their own language," and because the "only knowledge of the terms in which the treaty is framed is that imparted to [the Indians] by the interpreter employed by the United States," a "treaty must . . . be construed, not according to the technical meaning of its words to learned lawyers, but in the sense in which they would naturally be understood by the Indians." *Jones v. Meehan*, 175 U.S. 1, 11 (1899). "[W]e will construe a treaty with the Indians as [they] understood it, and as justice and reason demand, in all cases where power is exerted by the strong over those to whom they owe care and protection, and counterpoise the inequality by the superior justice which looks only to the substance of the right, without regard to technical rules." *United States v. Winans*, 198 U.S. 371, 380 (1905) (internal quotation marks omitted). "[W]e look beyond the written words to the larger context that frames the Treaty, including the history of the treaty, the negotiations, and the practical construction adopted by the parties." *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 196 (1999) (internal quotation marks omitted).

The Supreme Court has interpreted the Stevens Treaties on several occasions. In affirming Judge Boldt's decision, the Court wrote:

> [I]t is the intention of the parties, and not solely that of the superior side, that must control any attempt to interpret the treaties. When Indians are involved, this Court has long given special meaning to this rule. It has held that the United States, as the party with the presumptively superior negotiating skills and superior knowledge of the language in which the treaty is recorded, has a responsibility to avoid taking advantage of the other side. "[T]he treaty must therefore be construed, not according to the technical meaning of its words to learned lawyers, but in the sense in which they would naturally be understood by the Indians." *Jones v. Meehan*, 175 U.S. 1, 11. This rule, in fact, has thrice been explicitly relied on by the Court in broadly interpreting these very treaties in the Indians' favor. *Tulee v. Washington*, 315 U.S. 681 [1947]; *Seufort Bros. Co. v. United States*, 249 U.S. 194 [1919]; *United States v. Winans*, 198 U.S. 371 [1905]. *See also Washington v. Yakima Indian Nation*, 439 U.S. 463, 484 [1979].

Fishing Vessel, 443 U.S. at 675–76.

Washington has a remarkably one-sided view of the Treaties. In its brief, Washington characterizes the "treaties' principal purpose" as "opening up the region to settlement." Brief at 29. Opening up the Northwest for white settlement was indeed the principal purpose of the United States. But it was most certainly not the principal purpose of the Indians. Their principal purpose was to secure a means of supporting themselves once the Treaties took effect.

Salmon were a central concern. An adequate supply of salmon was "not much less necessary to the existence of the Indians than the atmosphere they breathed." *Winans*, 198 U.S. at 381. Richard White, an expert on the history of the American West and Professor of American History at Stanford University, wrote in a declaration filed in the district court that, during the negotiations for the Point-No-Point Treaty, a Skokomish Indian worried aloud about "how they were to feed themselves once they ceded so much land to the whites." Professor White wrote, to the same effect, that during negotiations at Neah Bay, Makah Indians "raised questions about the role that fisheries were to play in their future." In response to these concerns, Governor Stevens repeatedly assured the Indians that there always would be an adequate supply of fish. Professor White wrote that Stevens told the Indians during negotiations for the Point Elliott Treaty, "I want that you shall not have simply food and drink now but that you may have them forever." During negotiations for the Point-No-Point Treaty, Stevens said, "This paper is such as a man would give to his children and I will tell you why. This paper gives you a home. Does not a father give his children a home? . . . This paper secures your fish. Does not a father give food to his children?" *Fishing Vessel*, 443 U.S. at 667 n.11 (ellipsis in original).

The Indians did not understand the Treaties to promise that they would have access to their usual and accustomed fishing places, but with a qualification that would allow the government to diminish or destroy the fish runs. Governor Stevens did not make, and the Indians did not understand him to make, such a cynical and

disingenuous promise. The Indians reasonably understood Governor Stevens to promise not only that they would have access to their usual and accustomed fishing places, but also that there would be fish sufficient to sustain them. They reasonably understood that they would have, in Stevens' words, "food and drink . . . forever." As the Supreme Court wrote in *Fishing Vessels*:

> Governor Stevens and his associates were well aware of the "sense" in which the Indians were likely to view assurances regarding their fishing rights. During the negotiations, the vital importance of the fish to the Indians was repeatedly emphasized by both sides, and the Governor's promises that the treaties would *protect that source of food and commerce* were crucial in obtaining the Indians' assent. It is absolutely clear, as Governor Stevens himself said, that neither he nor the Indians intended that the latter should be excluded from their ancient fisheries, and it is accordingly inconceivable that either party deliberately agreed to authorize future settlers to crowd the Indians out of any *meaningful use* of their accustomed places to fish.

Id. at 676–77 (citations and internal quotation marks omitted) (emphases added).

Even if Governor Stevens had not explicitly promised that "this paper secures your fish," and that there would be food "forever," we would infer such a promise. In *Winters v. United States*, 207 U.S. 564 (1908), the treaty creating the Fort Belknap Reservation in Montana did not include an explicit

reservation of water for use on the reserved lands, but the Supreme Court inferred a reservation of water sufficient to support the tribe. The purpose of the treaty was to reserve land on which the Indians could become farmers. Without a reservation of water, the "lands were arid, and . . . practically valueless." *Id.* at 576. "[B]etween two inferences, one of which would support the purpose of the agreement and the other impair or defeat it," the Court chose the former. *Id.* at 577.

Similarly, in *United States v. Adair*, 723 F.2d 1394 (9th Cir. 1983), the Klamath Tribe in Oregon had entered into an 1854 treaty under which it relinquished 12 million acres, reserving for itself approximately 800,000 acres. The treaty promised that the tribe would have the right to "hunt, fish, and gather on their reservation," *id.* at 1398, but contained no explicit reservation of water rights. A prime hunting and fishing area on the reservation was the Klamath Marsh, whose suitability for hunting and fishing depended on a flow of water from the Williamson River. A primary purpose of the treaty was to "secure to the Tribe a continuation of its traditional hunting and fishing" way of living. *Id.* at 1409. Because game and fish at the Klamath Marsh depended on a continual flow of water, the treaty's purpose would have been defeated without that flow. In order to "support the purpose of the agreement," *Winters*, 207 U.S. at 577, we inferred a promise of water sufficient to ensure an adequate supply of game and fish. *Adair*, 723 F.2d at 1411.

Thus, even if Governor Stevens had made no explicit promise, we would infer, as in *Winters* and *Adair*, a promise to "support the purpose" of the

Treaties. That is, even in the absence of an explicit promise, we would infer a promise that the number of fish would always be sufficient to provide a "moderate living" to the Tribes. *Fishing Vessel*, 443 U.S. at 686. Just as the land on the Belknap Reservation would have been worthless without water to irrigate the arid land, and just as the right to hunt and fish on the Klamath Marsh would have been worthless without water to provide habitat for game and fish, the Tribes' right of access to their usual and accustomed fishing places would be worthless without harvestable fish.

In *Washington III*, we vacated the district court's declaration of a broad and undifferentiated obligation to prevent environmental degradation. We did not dispute that the State had environmental obligations, but, in the exercise of discretion under the Declaratory Judgment Act, we declined to sustain the sweeping declaratory judgment issued by the district court. We wrote, "The legal standards that will govern the State's precise obligations and duties under the treaty with respect to the myriad State actions that may affect the environment of the treaty area will depend for their definition and articulation upon concrete facts which underlie a dispute in a particular case." *Washington III*, 759 F.2d at 1357.

We concluded:

> The State of Washington is bound by the treaty. If the State acts for the primary purpose or object of affecting or regulating the fish supply or catch in noncompliance with the treaty as interpreted by past decisions, it will be subject to immediate correction and remedial action by the courts. In other instances, the measure of

> the State's obligation will depend for its precise legal formulation on all of the facts presented by a particular dispute.

Id. There is no allegation in this case that in building and maintaining its barrier culverts the State has acted "for the primary purpose or object of affecting or regulating the fish supply or catch in noncompliance with the treaty." The consequence of building and maintaining the barrier culverts has been to diminish the supply of fish, but this consequence was not the State's "primary purpose or object." The "measure of the State's obligation" therefore depends "on all the facts presented" in the "particular dispute" now before us.

The facts presented in the district court establish that Washington has acted affirmatively to build and maintain barrier culverts under its roads. The State's barrier culverts within the Case Area block approximately 1,000 linear miles of streams suitable for salmon habitat, comprising almost 5 million square meters. If these culverts were replaced or modified to allow free passage of fish, several hundred thousand additional mature salmon would be produced every year. Many of these mature salmon would be available to the Tribes for harvest.

Salmon now available for harvest are not sufficient to provide a "moderate living" to the Tribes. *Fishing Vessel*, 443 U.S. at 686. The district court found that "[t]he reduced abundance of salmon and the consequent reduction in tribal harvests has damaged tribal economies, has left individual tribal members unable to earn a living by fishing, and has caused cultural and social harm to the Tribes in

addition to the economic harm." The court found, further, that "[m]any members of the Tribes would engage in more commercial and subsistence salmon fisheries if more fish were available."

We therefore conclude that in building and maintaining barrier culverts within the Case Area, Washington has violated, and is continuing to violate, its obligation to the Tribes under the Treaties.

B. Waiver by the United States

In the district court, Washington asserted a defense of "waiver and/or estoppel" based on action and inaction by the United States that, according to Washington, led the State to believe that its barrier culverts did not violate the Treaties. On appeal, Washington has dropped its estoppel argument, pressing only its waiver argument.

Washington alleged in the district court that WSDNR had developed, in consultation with the United States, a 1999 "Forest and Fish Report" that contemplated a fifteen-year schedule for "remediation of fish problems on forest roads" under the control of WSDNR. Washington alleged that it "reasonably concluded that by approving or failing to object to the State's 15-year remediation schedule for forest roads, the NMFS [National Marine Fisheries Service] had determined that the schedule satisfied any treaty obligation." Washington also alleged, with respect to "many" of the culverts under the control of WSDOT, that the culverts are "in highways funded in part by the United States," and that "[t]hese highways were designed according to standards set or approved by the Federal Highway Administration (FHWA) and its predecessors." Washington alleged that it "reasonably

concluded that by approving or failing to object to the State's culvert design and maintenance, the FHWA had determined that the design and maintenance satisfied any treaty obligation." Washington further alleged that the Army Corps of Engineers, in administering the Clean Water Act, and the NMFS and U.S. Fish & Wildlife Service, in administering the Endangered Species Act, issued permits to, or failed to object to, WSDOT culverts, and that Washington reasonably relied on their action and inaction to conclude that it had satisfied any treaty obligations.

The United States may abrogate treaties with Indian tribes, just as it may abrogate treaties with fully sovereign nations. However, it may abrogate a treaty with an Indian tribe only by an Act of Congress that "clearly express[es an] intent to do so." *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 202 (1999). Congress has not abrogated the Stevens Treaties. So long as this is so, the Tribes' rights under the fishing clause remain valid and enforceable. The United States, as trustee for the Tribes, may bring suit on their behalf to enforce the Tribes' rights, but the rights belong to the Tribes.

The United States cannot, based on laches or estoppel, diminish or render unenforceable otherwise valid Indian treaty rights. *See, e.g., Cramer v. United States*, 261 U.S. 219, 234 (1923) (where Indians had treaty rights to land, leasing of the land to a non-Indian defendant "by agents of the government was . . . unauthorized and could not bind the government; much less could it deprive the Indians of their rights"); *United States v. Washington*, 157 F.3d 630, 649 (9th Cir. 1998) ("[L]aches or estoppel is not available to defeat Indian treaty rights.") (quoting *Swim v.*

Bergland, 696 F.2d 712, 718 (9th Cir. 1983)); and *United States v. Ahtanum Irrigation Dist.*, 236 F.2d 321, 334 (9th Cir. 1956) ("No defense of laches or estoppel is available to the defendants here for the Government[,] as trustee for the Indian Tribe, is not subject to those defenses."). The same is true for waiver. Because the treaty rights belong to the Tribes rather than the United States, it is not the prerogative of the United States to waive them.

Washington argues the above line of cases has been "called in doubt" by *City of Sherrill v. Oneida Indian Nation of N.Y.*, 544 U.S. 197 (2005). Brief at 42. We disagree. Suit was brought in *Sherrill* by the Oneida Indian Nation ("OIN"), whose lands once comprised six million acres in central New York State. In 1788, in the Treaty of Fort Schuyler, OIN reserved 300,000 acres of its tribal land and ceded the rest to New York. Two years later, Congress passed the Indians Trade and Intercourse Act (the "Nonintercourse Act"), which required federal approval for the sale of tribal land. New York largely ignored the law and in the following years obtained large quantities of tribal land through treaties with OIN. The United States did little to stop these transactions; indeed, its agents took an active role in encouraging Oneidas to move west. By 1838, Oneidas had sold all but 5,000 acres of their reserved lands. By 1920, their ownership had dwindled to 32 acres.

In 1985, the Supreme Court held that the sale of OIN lands had been unlawful, and that the OIN was entitled to monetary compensation for these sales. *See Cnty. of Oneida v. Oneida Indian Nation of N.Y. State*, 470 U.S. 226 (1985). In 1997 and 1998, OIN purchased on the open market two parcels of

land, located within the boundaries of its ancestral reservation, that had been sold to a non-Indian in 1807. OIN claimed tribal sovereign status for the purchased parcels, including the sovereign right to be free of local property taxes. In *Sherrill*, the Court held against OIN, writing that "the Tribe cannot unilaterally revive its ancient sovereignty, in whole or in part, over the parcels at issue." 544 U.S. at 203.

The case before us is radically different from *Sherrill*. The question in our case is not whether, as in *Sherrill*, a tribe has sovereignty over land within the boundaries of an abandoned reservation. The Tribes have not abandoned their reservations. Nor is the question whether, as in *Sherrill*, the Tribes have acted to relinquish their rights under the Treaties. The Tribes have done nothing to authorize the State to construct and maintain barrier culverts. Nor, finally, is the question whether, as in *Sherrill*, to allow the revival of disputes or claims that have long been left dormant. As described above, Washington and the Tribes have been in a more or less continuous state of conflict over treaty-based fishing rights for over one hundred years.

C. Washington's Cross-Request

1. Injunction

Washington asserted a "cross-request" (in effect, a counterclaim) based on the United States' construction and maintenance of barrier culverts on its own land. Washington contended that if its barrier culverts violate the Treaties, so too do the United States' barrier culverts. Washington contended that an injunction requiring it to correct its barrier culverts, while leaving undisturbed those of the

United States, imposed a disproportionate and therefore unfair burden on the State. Washington sought an injunction that would require the United States "to fix and thereafter maintain all culverts built or maintained by [the United States] . . . before the State of Washington is required to repair or remove any of its culverts."

The district court struck the cross-request for an injunction and subsequently denied Washington's motion to amend. It did so on two grounds. First, it held that Washington's cross-request was barred by sovereign immunity. Second, it held that Washington did not have standing to assert treaty rights belonging to the Tribes. We agree with both grounds.

a. Sovereign Immunity

The United States enjoys sovereign immunity from unconsented suits. However, when the United States files suit, consent to counterclaims seeking offset or recoupment will be inferred. *United States v. Agnew*, 423 F.2d 513, 514 (9th Cir. 1970). Washington contends that the injunction it seeks against the United States is "recoupment." We disagree.

The Tenth Circuit has set forth three criteria that must be satisfied for a recoupment claim:

> To constitute a claim in recoupment, a defendant's claim must (1) arise from the same transaction or occurrence as the plaintiff's suit; (2) seek relief of the same kind or nature as the plaintiff's suit; and (3) seek an amount not in excess of the plaintiff's claim.

Berrey v. Asarco Inc., 439 F.3d 636, 645 (10th Cir. 2006); *see Fed. Deposit Insur. Corp. v. Hulsey*, 22 F.3d

1472, 1487 (10th Cir. 1994). We adopt these criteria as our own, and make explicit that the remedy (the "amount") sought by the United States and by the defendant in recoupment must be monetary.

It is implicit in the use of the word "amount" in *Berrey*'s third criterion that a recoupment claim is a monetary claim. A claim for recoupment, if successful, can reduce or eliminate the amount of money that would otherwise be awarded to the plaintiff. It cannot result in an affirmative monetary judgment in favor of the party asserting the claim: "Although a counterclaim may be asserted against a sovereign by way of set off or recoupment to defeat or diminish the sovereign's recovery, no affirmative relief may be given against a sovereign in the absence of consent." *Agnew*, 423 F.2d at 514; *see also United States v. U.S. Fid. & Guar. Co.*, 309 U.S. 506, 511 (1940) ("[A] defendant may, without statutory authority, recoup on a counterclaim an amount equal to the principal claim."); *Black's Law Dictionary* 1466 (10th ed. 2009) ("Recoupment: 1. The getting back or regaining of something, esp. expenses. 2. The withholding, for equitable reasons, of all or part of something that is due. . . . 3. Reduction of a plaintiff's damages because of a demand by the defendant arising out of the same transaction. . . . 4. The right of a defendant to have the plaintiff's claim reduced or eliminated because of the plaintiff's breach of contract or duty in the same transaction."). The parties have cited no case, and we have found none, in which the term recoupment has been applied to non-monetary relief such as an injunction.

Washington's cross-request for an injunction thus does not qualify as a claim for recoupment and is barred by sovereign immunity.

b. Standing

Washington seeks an injunction requiring the United States to correct its barrier culverts on the ground that the United States is bound by the Treaties in the same manner and to the same degree as the State. Washington is, of course, correct that the United States is bound by the Treaties. Indian treaty rights were "intended to be continuing against the United States . . . as well as against the state[.]" *Winans*, 198 U.S. at 381–82. Our holding that Washington has violated the Treaties in building and maintaining its barrier culverts necessarily means that the United States has also violated the Treaties in building and maintaining its own barrier culverts.

However, any violation of the Treaties by the United States violates rights held by the Tribes rather than the State. The Tribes have not sought redress against the United States in the proceeding now before us.

2. Recoupment of Part of Washington's Costs

In its Petition for Panel Rehearing and for Rehearing En Banc, filed after our opinion came down, *see United States v. Washington*, 827 F.3d 836 (9th Cir. 2016), Washington contends that we misconstrued its appeal of the district court's denial of its cross-request. Washington writes in its Petition:

> The State's original [cross-request] sought a variety of remedies, including that the federal government be required to (1) pay part

> of the cost of replacing state culverts that were designed to federal standards; (2) take actions on federal lands to restore salmon runs; and (3) replace federal culverts in Washington. But on appeal, the State pursued only the first of these remedies.

We did not, and do not, so understand the State's appeal. Contrary to Washington's statement, it did appeal the district court's denial of its cross-request for an injunction requiring the United States to repair or replace the United States' own barrier culverts. It did not appeal a denial of a request that the United States be required to pay part of its costs to repair or replace its culverts.

In the district court, Washington stated in the body of its cross-request that "[t]he United States has a duty to pay all costs incurred by the State to identify and fix any and all barrier culverts." But in its demand for relief, Washington did not demand any monetary payment from the United States, unless its boilerplate request ("The State of Washington further requests all other relief the Court deems just and equitable") could be deemed such a demand. Not surprisingly, in denying Washington's cross-request, the district court did not discuss a demand for monetary payment from the United States. In its brief to us, Washington writes in the introduction that the district court erred in denying its request to allow the State "to recoup some of the costs of compliance from the United States because it specified the culvert design and caused much of the decline in the salmon runs." But Washington makes no argument in the body of its brief that it should be allowed to recover

from the United States any part of the cost to repair or replace its own barrier culverts.

When considering Washington's appeal, we did not understand it to argue that it should have been awarded, as recoupment or set-off, a monetary award from the United States. Given Washington's failure to make this argument in the body of its brief, the argument was waived. *Smith v. Marsh*, 194 F.3d 1045, 1052 (9th Cir. 1999). However, given the vigor with which Washington now makes the argument in its Petition for Rehearing and Rehearing En Banc, we think it appropriate to respond on the merits.

Washington's argument is easily rejected. As recounted above, a claim for recoupment must, *inter alia*, "seek relief of the same kind or nature as the plaintiff's suit." *Berrey*, 439 F.3d at 645. Washington's claim does not satisfy this criterion. The United States, the plaintiff, sought injunctive relief against Washington. Washington sought a monetary award. These two forms of relief are not "of the same kind or nature."

D. Injunction

The district court held a trial in 2009 and 2010 to determine the appropriate remedy for Washington's violation of the Treaties. At the time of trial, there were 1,114 state-owned culverts in the Case Area. At least 886 of them blocked access to "significant habitat," defined as 200 linear meters or more of salmon habitat upstream from the culvert to the first natural passage barrier. More barrier culverts were identified or constructed within the Case Area after 2009. The court estimated in its 2013 Memorandum and Decision that at the then-current

rate of remediation, all of the barrier culverts under the control of WSDNR, State Parks, and WDFW would be corrected by October 31, 2016. The great majority of barrier culverts, however, were under WSDOT's control. In 2009, when trial began, there were 807 identified WSDOT barrier culverts. Additional WSDOT barrier culverts were constructed or identified after that date.

In 1997, WDFW and WSDOT reported to the Washington State legislature that WSDOT culverts blocked 249 linear miles of stream, comprising over 1.6 million square meters of salmon habitat, which they estimated was sufficient to produce 200,000 adult salmon per year. Based on WDFW records, the district court found that at the time of trial, state-owned barrier culverts in the Case Area blocked access to approximately 1,000 miles of stream, comprising almost 5 million square meters of salmon habitat.

The district court issued a permanent injunction in 2013, on the same day it issued its Memorandum and Decision. The court ordered the State, in consultation with the Tribes and the United States, to prepare within six months a current list of all state-owned barrier culverts within the Case Area. The court ordered that identification of a culvert as a "barrier" be based on the methodology specified in the Fish Passage Barrier and Surface Water Diversion Screening and Prioritization Manual ("Assessment Manual") published by WDFW in 2000. The court ordered WSDNR, State Parks, and WDFW to provide fish passage through all their barrier culverts on the list by October 31, 2016 — the date by which these

three agencies were already expected to complete correction of their barrier culverts.

For barrier culverts under the control of WSDOT, the injunction was more nuanced. In Paragraph 6 of the injunction, the court ordered WSDOT to provide, within seventeen years of the date of the order, and "in accordance with the standards set out in this injunction," fish passage for each barrier culvert with more than 200 linear meters of salmon habitat upstream to the first natural passage barrier. In Paragraph 7, the court ordered WSDOT to replace existing barrier culverts above which there was less than 200 linear meters of accessible salmon habitat only at the "end of the useful life" of the culverts, or sooner "as part of a highway project." In Paragraph 8, the court allowed WSDOT to defer correction of some of the culverts described in Paragraph 6. Deferred culverts can account for up to ten percent of upstream habitat from the culverts described in Paragraph 6. WSDOT's choice of which culverts to defer is to be made in consultation with the Tribes and the United States. The court specified that the choice of culverts could be guided by the "Priority Index" methodology described in the WDFD Assessment Manual. That methodology uses cost as a permissible factor in determining priority. Assessment Manual at 55. Culverts deferred under Paragraph 8 are to be replaced on the more lenient schedule specified in Paragraph 7.

In Paragraph 9, the district court ordered that the State

> shall design and build fish passage at each barrier culvert on the List in order to pass all

> species of salmon at all life stages at all flows where the fish would naturally seek passage. In order of preference, fish passage shall be achieved by (a) avoiding the necessity for the roadway to cross the stream, (b) use of full span bridge, (c) use of the "stream simulation" methodology . . . which the parties to this proceeding have agreed represents the best science currently available for designing culverts that provide fish passage and allow fluvial processes. Nothing in this injunction shall prevent the [State] from developing and using designs other than bridges or stream simulation in the future if the [State] can demonstrate that those future designs provide equivalent or better fish passage and fisheries habitat benefits than the designs required in this injunction.

In Paragraph 10, the court provided that the State may deviate from the design standards specified in Paragraph 9 in cases of emergency or where "extraordinary site conditions" exist. The court specified that it would "retain continuing jurisdiction . . . for a sufficient period to assure that the [State] compl[ies] with the terms of this injunction."

Washington declined to participate in the formulation of the injunction on the ground that it had not violated the Treaties and that, therefore, no remedy was appropriate. Washington now objects on several grounds to the injunction that was formulated without its participation. Washington specifically objects (1) that the injunction is too "broad," Brief at 50; (2) that the district court did not "defer to the State's expertise," *id.* at 54; (3) that the court did not

properly consider costs and equitable principles, *id.* at 57; (4) and that the injunction "impermissibly and significantly intrudes into state government operations." *Id.* at 63. Finally, Washington objects that its four specific objections support a contention that the court's injunction is inconsistent with "federalism principles." *Id.* at 47, 65. We consider the State's objections in turn.

1. Breadth of the Injunction

Washington contends in its brief that "[t]he Tribes *presented no evidence* that state-owned culverts are a significant cause of the decline [in salmon]. . . . Despite that *complete failure of proof*, the district court found that state-owned culverts 'have a significant total impact on salmon production.'" Brief at 50 (emphasis in original). Washington contends, further, that the district court "ordered replacement of nearly every state-owned barrier culvert within the case area without any specific showing that those culverts have significantly diminished fish runs or tribal fisheries, or that replacing them will meaningfully improve runs." *Id.*

Washington misrepresents the evidence and mischaracterizes the district court's order.

Contrary to the State's contention, the Tribes presented extensive evidence in support of the court's conclusion that state-owned barrier culverts have a significant adverse effect on salmon. The 1997 report prepared for the Washington State Legislature by two of the defendants in this case, WDFW and WSDOT, stated, "Fish passage at human made barriers such as road culverts is one of the most recurrent and

correctable obstacles to healthy salmonid stocks in Washington." The report concluded:

> A total potential spawning and rearing area of 1,619,839 m^2 (249 linear miles) is currently blocked by WSDOT culverts on the 177 surveyed streams requiring barrier resolution; this is enough wetted stream area to produce 200,000 adult salmonid annually. These estimates would all increase when considering the additional 186 barriers that did not have full habitat assessments.

The report recommended that state funding be supplied to remove "all barriers" under the control of the State:

> Planning is underway for resolution of at least seven more barriers during the 1997–99 biennium using dedicated funds, and to resolve all barriers in the next two or three decades. . . . Estimated cost is about $40 million, with resultant benefits exceeding $160 million.

Based on later WDFW figures, the district court found that at the time of trial state-owned barrier culverts in the Case Area blocked access to approximately 1,000 linear miles of stream, comprising almost 5 million square meters of salmon habitat. These figures, taken together with the 1997 figures supplied by WDFW and WSDOT, indicate that the total habitat blocked by state-owned barrier culverts in the Case Area is capable of producing several times the 200,000 mature salmon specified in the 1997 report.

The State contends that because of the presence of non-state-owned barrier culverts on the same streams as state-owned barrier culverts, the benefit obtained from remediation of state-owned culverts will be insufficient to justify the district court's injunction. The State writes:

> [S]tate-owned culverts are less than 25% of all known barrier culverts, and in some places, non-state culverts outnumber state-owned culverts by a factor of 36 to 1. Any benefit from fixing a state-owned culvert will not be realized if fish are blocked by other culverts in the same stream system.

There are several answers to the State's contention. First, it is true that in calculating whether a state culvert is a barrier culvert, and in determining the priority for requiring remediation, the court's injunction ignores non-state barriers on the same stream. But in so doing, the court followed the practice of the state itself. Paul Sekulich, formerly division manager in the restoration division in the habitat program of the Washington Department of Fish and Wildlife ("WDFW"), testified in the district court:

> Q: When you calculate a priority index number for a [state-owned] culvert, do you account for the presence of other fish passage barriers in a watershed?
>
> A: . . . When the priority index is calculated, it treats those other barriers as transparent. The reason we do that, we don't know when those other barriers are being corrected. So by treating them as transparent, you do a priority index that looks at potential habitat gain as if

> all those barriers would be corrected at some point in time.

Washington State law requires that a "dam or other obstruction across or in a stream" be constructed in such a manner as to provide a "durable and efficient fishway" allowing passage of salmon. Wash. Rev. Code § 77.57.030(1). If owners fail to construct or maintain proper fishways, the Director of WDFW may require them do so at their own expense. *Id.* at § 77.57.030(2).

Second, in 2009, on streams where there were both state and non-state barriers, 1,370 of the 1,590 non-state barriers, or almost ninety percent, were upstream of the state barrier culverts. Sixty nine percent of the 220 downstream non-state barriers allowed partial passage of fish. Of the 152 that allowed partial passage, "passability" was 67% for 80 of the barriers and 33% for 72 of them.

Third, the specific example provided by the state is a culvert on the Middle Fork of Wildcat Creek under State Route 8 in Grays Harbor County. The State is correct that there are 36 non-state barriers and only one state barrier culvert on this creek. The State fails to mention, however, that all of the non-state barriers are upstream of the state culvert. Further, it is apparent from the map in the district court record that the nearest non-state barrier is almost a half mile upstream.

Witnesses at trial repeatedly described benefits to salmon resulting from correction of barrier culverts. One example is evidence presented by Mike McHenry, habitat program manager for the Lower Elwha Klallam Tribe. In his written testimony, McHenry described several studies. One was a 2003 study of

culvert removal projects on the Stillaguamish River that opened up 19 linear kilometers of salmon habitat. According to the study, over 250 adult coho salmon were observed spawning in the newly accessible habitat in each of the two years immediately after the completion of the projects. Based on his own experience as habitat manager for the tribe, McHenry wrote that removal of barrier culverts on the Lower Elwha River had had a similar effect. In McHenry's view, "The systematic correction of barrier culverts is an important place to focus restoration efforts." He wrote, further, "The correction of human caused barriers is generally recognized as the second highest priority for restoring habitats used by Pacific salmon (following the protection of existing functional habitats)."

In his live testimony, McHenry stated that his tribe had corrected seventeen of thirty-one barriers in a particular watershed:

> McHenry: Because when we did the watershed assessment, we found that there were 50 miles of historically active stream that salmon could access in this watershed, and fully half that mileage was blocked by culverts of various ownerships. So to us, we applied our scientific knowledge and recommendations from the literature which indicated that when you're going to restore a place like this, you need to go after the barriers first.
>
> The Court: In your expert opinion, that was the biggest bang for your buck?
>
> McHenry: Yes.

Another example is the live testimony of Lawrence Wasserman, environmental policy manager for the Swinomish Indian Tribal Community. He testified that culvert remediation provides substantial benefits:

> There's an immediate access and immediate benefit to additional habitat when we replace a culvert . . . .
>
> If you compare that to having to plant trees, shade, it can take 10, 20, 50 years to get the trees large enough . . . .
>
> . . . We have a high confidence in design. By and large, we know how to fix culverts. . . . So we have a high confidence compared to many other more experimental restoration activities.
>
> It's fairly easy to monitor. If there were no fish there before, [then] we open a culvert and we can count fish[.] . . .
>
> A critical factor is that there's minimal impacts on adjacent land use or land owners. . . . [I]t's relatively infrequent where there needs to be a condemnation of other people's land or asking people to sell their land. . . .
>
> . . . It's cost effective. There have been some studies that have shown that, really, compared to other kinds of restoration activities, the cost per smolt produced is relatively low[.] . . .
>
> And finally, we get benefits with a broad sweep of culvert repairs. We get a very broad geographic distribution of benefits, and the

cumulative effects can accrue across a variety of watersheds.

It is true, as the evidence at trial showed, that correction of barrier culverts is only one of a number of measures that can usefully be taken to increase salmon production in the Case Area. It is also true that the benefits of culvert correction differ depending on the culvert in question. For example, Paul Wagner, manager of the culvert correction program for WSDOT, presented evidence in 2013 identifying 817 WSDOT barrier culverts blocking 937 linear miles of stream habitat in the Case Area. Wagner's evidence showed that correction of the 314 culverts blocking the most habitat would open up 655 of the 937 miles of total habitat. Correcting the 232 culverts blocking the least habitat would open up only 95 miles. Those 95 miles of habitat constitute 10.1 percent of the total habitat blocked by the 817 barrier culverts. The 232 culverts blocking those 95 miles constituted 28.4 percent of the total barrier culverts.

The district court's injunction took into account the facts that culvert correction is not the only factor in salmon recovery; that some culverts block more habitat than others; and that some culverts are more expensive to correct than others. The court ordered correction of high-priority culverts — those blocking 200 linear meters or more of upstream habitat — within seventeen years. For low-priority culverts — those blocking less than 200 linear meters of upstream habitat — the court ordered correction only at the end of the useful life of the existing culvert, or when an independently undertaken highway project would require replacement of the culvert. Further, recognizing the likelihood that accelerated

replacement of some high-priority culverts will not be cost-effective, the court allowed the State to defer correction of high-priority culverts accounting for up to ten percent of the total blocked upstream habitat, and to correct those culverts on the more lenient schedule of the low-priority culverts. Wagner's evidence indicates that if the sole criterion for choosing deferred culverts is the amount of blocked habitat, there will be approximately 230 deferred culverts. If cost of correction of particular culverts is added as a criterion, there will be a somewhat smaller number of deferred culverts.

In sum, we disagree with Washington's contention that the Tribes "presented no evidence," and that there was a "complete failure of proof," that state-owned barrier culverts have a substantial adverse effect on salmon. The record contains extensive evidence, much of it from the State itself, that the State's barrier culverts have such an effect. We also disagree with Washington's contention that the court ordered correction of "nearly every state-owned barrier culvert" without "any specific showing" that such correction will "meaningfully improve runs." The State's own evidence shows that hundreds of thousands of adult salmon will be produced by opening up the salmon habitat that is currently blocked by the State's barrier culverts. Finally, we disagree with Washington's contention that the court's injunction indiscriminately orders correction of "nearly every state-owned barrier culvert" in the Case Area. The court's order carefully distinguishes between high-and low-priority culverts based on the amount of upstream habitat culvert correction will open up. The order then allows for a further

distinction, to be drawn by WSDOT in consultation with the United States and the Tribes, between those high-priority culverts that must be corrected within seventeen years and those that may be corrected on the more lenient schedule applicable to the low-priority culverts.

2. Deference to the State's Expertise

Washington contends that the district court made a clearly erroneous finding of fact, concluding that correction of human-caused barriers is the highest priority in habitat restoration. It contends, further, that this finding led the court to ignore the expert testimony presented by both the State and the Tribes. Washington wrote in its brief:

> The State has concluded — and the Tribes agree — that a comprehensive approach to preserving and restoring salmon runs is the most productive and cost-effective . . . . The district court concluded, however, that "correction of human-caused barriers is recognized as the highest priority for restoring salmon habitat in the Case Area." On that basis, the court ordered injunctive relief focused solely on culverts, even though the cost of the injunction will likely reduce funding available for other salmon restoration efforts. The court's finding was clearly erroneous, and its approach was an abuse of discretion.
>
> In concluding that fixing culverts is "the highest priority for restoring salmon habitat in the Case Area," the court cited the declaration of tribal expert Mike McHenry. Mr. McHenry said no such thing.

Brief at 54–55.

Washington is mistaken. It is true that the district court made the factual finding to which Washington objects. Citing McHenry's evidence, the court wrote, "The correction of human-caused barriers is recognized as the highest priority for restoring salmon habitat in the Case Area." But the court's finding is amply supported by the record. With respect to restoring habitat (as distinct from *preserving* habitat, which has a higher priority), McHenry wrote that it is "generally recognized" that the correction of human-caused barriers is the highest priority. Further, McHenry testified that "you need to go after the barriers first" because that is the "biggest bang for the buck." Wasserman testified to the same effect, saying that "there's an immediate access and immediate benefit to additional habitat when we replace a culvert"; that "it's cost effective" compared to "other kinds of restoration activities"; and that "the cumulative effects can accrue across a variety of watersheds."

It is also true that the district court's injunction "focused solely on culverts" and did not order other remedies. But it is appropriate that the injunction should have done so. The court was acutely conscious of the fact that, while barrier culverts are an important cause of the decline of salmon in the Case Area, they are not the only cause. It wrote, "*A primary cause* of this decline is habitat degradation . . . . *One cause* of the degradation of salmon habitat is blocked culverts[.]" (Emphasis added.) However, because the only treaty violation alleged in this litigation was Washington's barrier culverts, the court acted appropriately in ordering only the correction of these

culverts. As the court wrote, "The scope of this subproceeding includes only those culverts that block fish passage under State-owned roads."

Contrary to Washington's contention, the district court had a sophisticated record-based understanding of the various causes of the decline of salmon in the Case Area, of what could be achieved by the correction of state-owned barrier culverts, and of the limitations on what could be achieved by culvert correction. The court's injunction is carefully crafted to reflect that understanding.

3. Costs and Equitable Principles

Washington contends that the district court's injunction fails properly to take costs into account, and that its injunction is inconsistent with equitable principles.

a. Costs

Washington writes in its brief that correction of WSDOT barrier culverts will cost approximately $1.88 billion over the course of the seventeen-year schedule ordered by the court, or "roughly $117 million per year of the injunction." (Using Washington's own estimates, a correct calculation is actually $110.6 million per year rather than $117 million.) Washington's estimated total cost is based on an assumption of 817 corrected culverts, at an average correction cost of $2.3 million per culvert.

Washington's cost estimates are not supported by the evidence. Washington contended at trial, as it now contends to us, that the average cost to replace a WSDOT barrier culvert would be $2.3 million. But the district court did not accept this estimate. The court

found that "the actual cost of construction for twelve WSDOT stream simulation culvert projects completed prior to the 2009 trial ranged from $413,000 to $1,674,411; the average cost for the twelve was $658,639 each." In 2013, the State submitted a declaration from WSDOT official Wagner listing thirty-one culvert correction projects completed statewide since October 2009. Of these, twenty-four used either a stream simulation design or a bridge. The declaration stated that the average cost for each these twenty-four projects was $1,827,168, not $2,300,000 as the State now contends. The district court noted that even Wagner's lower figure could not be confirmed because cost data was missing for eight of the twenty-four projects.

There are additional reasons to disregard the State's estimate of total cost. First, Washington assumes that all 817 of the state-owned barrier culverts will be corrected on the seventeen-year schedule. This is demonstrably incorrect. According to the State's own evidence, Paragraph 8 of the injunction will allow the State to defer correction of approximately 230 of the 817 culverts. If cost of barrier correction (rather than merely amount of upstream habitat) is taken into account in deciding which culverts to defer, fewer but more costly culverts will be deferred. Second, and perhaps more important, Washington must eventually correct its barrier culverts, irrespective of the court's order in this suit. The district court wrote that federal and state law require Washington to correct its barrier culverts "in any case," and that the only consequence of its order will be an "acceleration of barrier correction." The net costs imposed on Washington by the injunction are

thus not the full costs of barrier correction, but rather only the "marginal costs attributable to an accelerated culvert correction schedule."

Finally, we note that a portion of WSDOT's funding for correcting its barrier culverts will come from the United States. The court wrote, "[T]he state expects to receive over $22,000,000 for fish passage barrier projects from the federal government in the years 2011 to 2017. Of this amount, $15,813,000 is expected in the 2013–2015 biennium."

b. Equitable Principles

Washington makes one specific objection based on equitable principles. It objects that the court abused its discretion in requiring that "the State alone," rather than State in conjunction with the United States, be "burdened with the entire cost of culvert repair." Brief at 63. We disagree. The court's order required correction of only those barrier culverts that were built and maintained by the State. It was not an abuse of discretion to require the State to pay for correction of its own barrier culverts.

Further, we note more generally that the district court did consider equitable principles, and concluded that those principles favored the Tribes and the citizens of the State. The court wrote:

> The Tribes and their individual members have been harmed economically, socially, educationally, and culturally by the greatly reduced salmon harvests that have resulted from State-created or State-maintained fish passage barriers.

> This injury is ongoing, as efforts by the State to correct the barrier culverts have been insufficient. . . . Remedies at law are inadequate as monetary damages will not adequately compensate the Tribes and their individual members for these harms. . . .
>
> The balance of hardships tips steeply toward the Tribes in this matter. The promise made to the Tribes that the Stevens Treaties would protect their source of food and commerce was crucial in obtaining their assent to the Treaties' provisions. . . . Equity favors requiring the State of Washington to keep the promises upon which the Tribes relied when they ceded huge tracts of land by way of the Treaties.
>
> . . .
>
> The public interest will not be disserved by an injunction. To the contrary, it is in the public's interest, as well as the Tribes' to accelerate the pace of barrier correction. All fishermen, not just Tribal fishermen, will benefit from the increased production of salmon. . . . The general public will benefit from the enhancement of the resource and the increased economic return from fishing in the State of Washington. The general public will also benefit from the environmental benefits of salmon habitat restoration.

4. Intrusion into State Government Operations

Washington contends that the court's order "impermissibly and significantly intrudes into state

government operations." Brief at 63. Washington contends that it "was making great strides in repairing culverts before any federal court intervention," and that "there was no need for the court to issue a detailed and expensive injunction that sets an inflexible and tight schedule for culvert repair." *Id.* at 63–64. Washington implies that the cost of complying with the court's order will oblige the State to cut other important state programs:

> [T]he injunction will require the State to devote roughly $100 million per year more than it otherwise would have to culvert repair. This at a time when the State faces recurring budget shortfalls in the billions of dollars and has already made deep and painful cuts to subsidized health insurance for low income workers, K-12 schools, higher education, and basic aid for persons unable to work.

Id. at 58. We disagree.

The district court disagreed with Washington's contention that there was "no need" for the court to order correction of its barrier culverts. Based on the State's slow rate of barrier correction, the court concluded that "under the current State approach, the problem of WSDOT barrier culverts in the Case Area will never be solved." The district court also disagreed with the Washington's cost estimates. As seen above, Washington's estimate of its cost to comply with the court's order ("roughly $100 million per year" more than it would otherwise spend) is dramatically overstated.

The district court carefully considered the marginal cost imposed on Washington by its

injunction and concluded that the State could comply with the order without cutting vital state programs. The court relied on a state budget document showing that $9.9 billion was allocated to the state transportation budget for the 2011–2013 biennium. Of that $9.9 billion, $7.88 billion was allocated to WSDOT. Noting the separation of the transportation budget from other state budgets, the court concluded, "The separation of the Transportation Budget from the Operating and Capital Budgets ensures that money will not be taken from education, social services, or other vital State functions to fund culvert repairs."

5. Federalism Principles

Washington contends, based on the four specific objections just reviewed, that the district court's injunction violates principles of federalism. Washington asserts four principles of federalism:

> First, the remedy must be no broader than necessary to address the federal law violation. Second, courts must grant deference to a state's institutional competence and subject matter expertise. Third, courts must take cost into consideration and not substitute their budgetary judgment for that of the state. And finally, relief must be fashioned so that it is the least intrusive into state governmental affairs. The district court's injunction here contravenes all of these principles.

Blue Brief at 49. We will not quarrel here with these principles, stated at this level of generality. However, for the reasons given above, we have concluded that the district court's injunction violates none of them.

Further, a federalism-based objection to an injunction enforcing Indian treaty rights should not be viewed in the same light as an objection to a more conventional structural injunction. Washington cites two Supreme Court cases in support of its federalism objection — *Rizzo v. Goode*, 423 U.S. 362 (1976) (structural injunction requiring reform of the Philadelphia police department), and *Horne v. Flores*, 557 U.S. 433 (2009) (structural injunctions requiring Arizona to comply with Equal Educational Opportunities Act of 1974). However, Washington fails to cite the Supreme Court case directly on point — *Fishing Vessel*, 443 U.S. 658 (1979) — in which the Court affirmed detailed injunctions requiring Washington to comply with the very Treaties at issue in this case.

The district court in *Fishing Vessel* had entered a series of detailed injunctions implementing its holding that the Treaties entitled the Tribes to take up to fifty percent of harvestable salmon in any given year. Washington strenuously resisted, with the result that the district court effectively took over much of the State's management of the salmon fishery. Washington objected both to the district court's interpretation of the Treaties, and to the court's intrusion into its affairs. The Supreme Court affirmed the district court's holding on the meaning of the Treaties. It then rejected, in no uncertain terms, federalism-based objections to the injunctions enforcing the Treaties:

> Whether [Washington] Game and Fisheries may be ordered actually to promulgate regulations having effect as a matter of state law may well be doubtful. But

> the District Court may prescind that problem by assuming direct supervision of the fisheries if state recalcitrance or state-law barriers should be continued. *It is therefore absurd to argue . . . both that the state agencies may not be ordered to implement the decree and also that the District Court may not itself issue detailed remedial orders as a substitute for state supervision.*

Fishing Vessel, 443 U.S. at 695 (emphasis added).

6. Modification of the Injunction

It is possible that changing or newly revealed facts or circumstances will affect the fairness or efficacy of an injunction. In the case before us, the district court has ordered that many of WSDOT's high-priority barrier culverts be corrected over the course of seventeen years, and that the remainder be corrected only at the end of the culvert's natural life or when road work undertaken for independent reasons would in any event require replacement of the culvert. It is possible that, during this extended period, changed or newly revealed facts or circumstances will justify a modification of the injunction. The district court should not hesitate to modify its injunction if this proves to be the case. As the Supreme Court wrote in *System Federation No. 91 v. Wright*, 364 U.S. 642, 647 (1961), "a sound judicial discretion may call for the modification of the terms of an injunctive decree if the circumstances, whether of law or fact, obtaining at the time of its issuance have changed, or new ones have since arisen." *See also Rufo v. Inmates of Suffolk Cnty. Jail*, 502 U.S. 367, 380–81 (1992). In affirming the judgment entered by the

district court in this case, we emphasize that the flexibility inherent in equity jurisdiction allows the court, if changed or newly revealed facts or circumstances warrant, to modify its injunction accordingly.

Conclusion

In sum, we conclude that in building and maintaining barrier culverts Washington has violated, and continues to violate, its obligation to the Tribes under the fishing clause of the Treaties. The United States has not waived the rights of the Tribes under the Treaties, and has not waived its own sovereign immunity by bringing suit on behalf of the Tribes. The district court did not abuse its discretion in enjoining Washington to correct most of its high-priority barrier culverts within seventeen years, and to correct the remainder at the end of their natural life or in the course of a road construction project undertaken for independent reasons.

AFFIRMED.

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, et al., Defendants.	CASE NO. CV 70-9213 Subproceeding 01-01 MEMORANDUM AND DECISION

This matter was initiated by a Request for Determination ("Request") filed in 2001 by plaintiffs Suquamish Indian Tribe, Jamestown S'Klallam, Lower Elwha Band of Klallam, Port Gamble Clallam, Nisqually Indian Tribe, Nooksack Tribe, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Upper Skagit Tribe, Tulalip Tribe, Lummi Indian Nation, Quinault Indian Nation, Puyallup Tribe, Hoh Tribe, Confederated Bands and Tribes of the Yakama Indian Nation, Quileute Indian Tribe, Makah Nation, and Swinomish Tribal Community, and Muckleshoot Indian Tribe (hereafter, "the Tribes"). Plaintiff United States of America joined in the request. The Request for Determination, filed pursuant to the Permanent Injunction in this case, asked the Court to find that the State of Washington has a treaty-based duty to preserve fish runs, and sought to compel the State to repair or replace culverts that impede salmon migration to or from spawning grounds.

On August 23, 2007, the Court ruled on cross-motions for summary judgment, finding in favor of the Tribes and declaring that

> the right of taking fish, secured to the Tribes in the Stevens Treaties, imposes a duty upon the State to refrain from building or operating culverts under State-maintained roads that hinder fish passage and thereby diminish the number of fish that would otherwise be available for Tribal harvest. The Court further declares that the State of Washington currently owns and operates culverts that violate this duty.

Order on Cross-Motions for Summary Judgment. Dkt. # 392, p. 12. The matter was then set for a bench trial on remedies.

The trial was held over seven days in October 2009, and final argument was heard on June 7, 2010. The Court has delayed its ruling in the hope that the parties would resume their settlement negotiations, but it does not appear that has occurred. The Court directed the parties to file supplemental memoranda on the current status of the matter by February 1, 2013. Dkt. # 733. Having considered the testimony and exhibits submitted at trial, together with the final arguments and supplemental memoranda, the Court now issues its Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

1. This is a designated subproceeding of *United States v. Washington*, C70-9213, based on language in the 1855 Treaty of Point Elliot in which the Tribes

were promised that "[t]he right of taking fish at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory." During the negotiations leading up to the signing of the treaties, Governor Issac Stevens and other negotiators assured the Tribes of their continued access to their usual fisheries. Declaration of Richard White, Dkt. # 296, ¶¶ 8, 9, 11. Governor Stevens assured the Tribes that even after they ceded huge quantities of land, they would still be able to feed themselves and their families forever. As Governor Stevens stated, "I want that you shall not have simply food and drink now but that you may have them forever." *Id.*, ¶ 14. Both the negotiators and the Tribes believed that the fisheries were inexhaustible. *Id.* Thus, during the negotiations, the "Indians, like whites, assumed that their cherished fisheries would remain robust forever." Declaration of Joseph Taylor III, Dkt. # 297, ¶ 7.

2. In construing the treaty, the Supreme Court found that

> Governor Stevens and his associates were well aware of the "sense" in which the Indians were likely to view assurances regarding their fishing rights. During the negotiations, the vital importance of the fish to the Indians was repeatedly emphasized by both sides, and the governor's promises that the treaties would protect that source of food and commerce were crucial in obtaining the Indians' assent. It is absolutely clear, as Governor Stevens himself said, that neither he nor the Indians intended that the latter "should be excluded from their ancient fisheries", and it is accordingly

> inconceivable that either party deliberately agreed to authorize future settlers to crowd the Indians out of any meaningful use of their accustomed places to fish.

State of Washington v. Washington State Commercial Passenger Fishing Vessel Association, 443 U.S. 658, 677 (1979) (citations omitted).

3. The following facts are admitted by the parties:[1]

SALMON BIOLOGY AND FISH PASSAGE

3.1 In 1973, biologists from some of the parties to this case prepared a Joint Statement Regarding the Biology, Status, Management, and Harvest of the Salmon and Steelhead Resources of the Puget Sound and Olympic Peninsular Drainage Areas of Western Washington. The parties submitted it to this Court as Joint Exhibit 2a. In Section 3-400 of the August 24, 1973 Final Pretrial Order in Phase I (Docket #353), the parties adopted its contents as admitted facts in this case, and the Court adopted them as findings of fact in Finding of Fact 164 of Final Decision #1 (Docket #414). The contents of Part I and Part II through 2.2.5.3 of Joint Exhibit 2a are hereby incorporated by reference as admitted facts in this Subproceeding.

3.2 For purposes of this case, the terms "anadromous salmonids" or "salmon" refer to the following species: Oncorhynchus kisutch (Coho);

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[1]Docket numbers in this section refer to the main case, C70-9213.

Oncorhynchus tshawytscha (Chinook); Oncorhynchus gorbuscha (Pink); Oncorhynchus nerka (sockeye); Oncorhynchus keta (Chum); and Oncorhynchus mykiss (formerly Salmo gairdnerii) (steelhead).

3.3 Salmon spawn in freshwater, migrate to the sea, and return to spawn again in fresh water. When juvenile salmon move from freshwater to salt, they are known as smolts.

3.4 Transport and storage of wood, large woody debris, and sediment in fish bearing streams are important components of healthy productive salmon habitat.

3.5 Juvenile salmon move both upstream and downstream in response to habitat changes, predation, and population pressures.

MODERN TRIBAL HARVESTS

3.6 In 1974 this Court found: "Subsequent to the execution of the treaties and in reliance thereon, the members of the Plaintiff tribes have continued to fish for subsistence, sport and commercial purposes at their usual and accustomed places. Such fishing provided and still provides an important part of their livelihood, subsistence and cultural identity." *United States v. Washington*, 384 F. Supp. 312 (W.D. Wash. 1974), Finding of Fact 31.

3.7 In 1974 this Court found: "Fish continue to provide a vital component of many Indians' diet. For others it may remain an important food in a symbolic sense---analogous to Thanksgiving turkey. Few habits are stronger than dietary habits and their persistence is usually a matter of emotional preference rather than a nutritional need. For some Indians, fishing is

also economically important. Fishing is also important for some non-Indians." *United States v. Washington*, 384 F. Supp. 312 (W.D. Wash. 1974), Finding of Fact 29.

3.8 The magnitude of modern tribal salmon harvest has fluctuated as a result of many factors, some of which are human-caused and some of which are naturally occurring.

3.9 As a result of widespread alterations of waterways and sharply diminished salmon populations, the areas available for tribal harvest of salmon have decreased significantly since 1855.

3.10 Since Treaty time, overharvest, habitat alteration, poor hatchery practices, and hydropower development are some of the human-caused factors that have greatly reduced the abundance of salmon available for tribal harvest in the Case Area.

3.11 As described in Findings of Fact 33, 56, 70, and 193 in Final Decision, #1, the number of tribal members engaged in the harvest of fish declined for several decades before 1974 due to employment acculturation, the crowding out of Indians from their traditional fishing places by non-Indians, and many years of state enforcement actions against Indians exercising their claimed treaty rights, among other reasons.

3.12 As stipulated by the parties in Stipulation Re: Treaty and Non-Treaty Harvest Data (Docket # 19363/577), Tribal harvest of salmon in the Case Area from 1974 through 2007, as recorded in the treaty ticket fish database maintained by the Northwest Indian Fisheries Commission, is shown

below and in Exhibit AT-003-16 (chart attached as Attachment A to Order).

3.13 Tribal members in modern times and to the present have continued to harvest salmon despite increased production costs, restricted fishing areas, fewer and shorter open seasons, fluctuating market prices, competition from farm raised salmon, other human and nonhuman stresses on harvest, and the availability of other economic opportunities.

3.14 Many members of the Tribes would engage in more commercial and subsistence salmon fisheries if more fish were available.

3.15 Some Tribes are engaged in fisheries enhancement for the purpose of providing additional fishing opportunities for tribal members, but those efforts are inadequate to meet tribal needs for salmon.

3.16 No plaintiff Tribe has abandoned its fisheries.

3.17 "Escapement" refers to adult salmon that escape harvest and other mortality and return to the spawning grounds.

3.18 Salmon of the same species, originating in the same area and returning to spawn at the same time of year, are referred to as a "stock."

3.19 The State and the Tribes regulate their respective fisheries to restrict the amount of harvest that might otherwise occur by limiting the number of vessels, the type of harvest gear, and the times and places during which fishing may occur.

3.20 State and tribal fisheries co-managers plan salmon fisheries each year based, among other

things, on the predicted abundance of harvestable salmon within the Case Area, the need for adequate escapement to replenish the population, and the predicted effects of harvest on particular stocks. Because some salmon stocks that spawn in the Case Area are intercepted in fisheries up and down the west coast of North America, and because some fisheries in the Case Area intercept stocks that spawn in Canada or the Columbia River Basin, the process of planning state and tribal fisheries occurs as part of a broader planning context that involves the governments of Canada, the United States, Alaska, Oregon, California, Idaho, and Indian Tribes that are not parties to *United States v. Washington*.

3.21 Some State and tribal fisheries within the Case Area harvest stocks that originate both within and outside the Case Area, and are planned to provide adequate escapement of stocks originating both within and outside the Case Area. Some salmon fisheries in northern Puget Sound and the Strait of Juan de Fuca target stocks from the Fraser River in Canada. Harvest levels of Canadian stocks are set through negotiations with Canada under the Pacific Salmon Treaty.

3.22 Mixed stock fisheries are those in which salmon of more than one stock are present.

3.23 Mixed stock fisheries that target one stock may incidentally harvest other stocks.

3.24 Salmon stocks of more and less abundance often are found together throughout the Case Area. To protect stocks that are weak or low in abundance, State and Tribal fisheries co-managers often limit the harvest of stronger stocks in mixed stock fisheries to

levels below those which the stronger stocks could sustain. The impact of this management strategy on harvest can be two-fold: first, additional harvest of stronger stocks can be limited in a mixed stock fishery; and second, a fishery can be moved to "terminal areas" where weaker stocks are not mixed with stronger stocks. Because Tribal treaty fishers can harvest only in their usual and accustomed grounds and stations ("U&A"), the mixed stock management strategy of limiting harvest of abundant stocks to protect less abundant stocks can affect the harvest by a treaty tribe with U&A in the mixed stock fishing area but without U&A in the terminal area where the harvest has been moved.

3.25 As stipulated by the parties in the Stipulation Re: Treaty and Non-Treaty Harvest Data (Docket #19363/577), for purposes of this Subproceeding only, the following table (attached to this Order as Attachment A) depicts treaty tribal catch of sockeye presumed to be of Canadian origin. Treaty catch of US origin versus Canadian origin sockeye stocks in Puget Sound was determined by applying an assumed percentage to total catch for each year. For Canadian origin stocks, the assumed percentage was determined by totaling the treaty sockeye landings in pre-terminal areas (Salmon Catch Reporting Areas 4B, 5, 6, 6C, 7, 7A and 9) and dividing by the total. The Salmon Catch Reporting Areas are depicted in Exhibits AT-008-2 and AT-008-3.

STOCK STATUS

3.26 Salmon populations in the Case Area at Treaty time were robust and had not suffered any appreciable human-caused decline.

3.27 There have been declines in the populations of salmon originating within the Case Area since Treaty time.

3.28 Today, while some salmon stocks in the Case Area are healthy, others are depressed, indanger of extinction, or already extinct.

CULVERT OPERATION AND EFFECTS

3.29 Culverts are structures used to pass roads over streams and streams under roads.

3.30 Whether a culvert poses a velocity barrier to fish depends, in part, on the swimming strength of the fish in terms of both speed and endurance.

3.31 Different species of salmon have different swimming strengths.

3.32 Juvenile salmon have less swimming strength than adult salmon of the same species.

3.33 Larger culverts have lower headwater at a given flow than smaller culverts and pass debris and sediment better than smaller culverts and therefore reduce the risk of structural failure of culverts at road crossings. Washington law currently requires that culverts shall be installed according to an approved design to maintain structural integrity to the 100-year peak flow with consideration of the debris loading likely to be encountered.

3.34 Among other factors, a partial fish passage barrier may delay migration and block the passage of smaller salmon.

CULVERT CORRECTION AND DESIGNS

3.35 Various options are available to prevent or remedy the existence of fish passage barrier culverts at stream-road intersections. These options include bridges, different types of culvert design methods, and relocation of roads to avoid the stream.

3.36 Scientists employed by state, federal and tribal agencies continue to conduct research on fish passage through culverts.

3.37 The current state of scientific knowledge supports the proposition that culverts which most closely simulate the characteristics of the natural stream channel and substrate are the least likely to inhibit fish passage.

3.38 During the 1990s, the Washington Department of Fish and Wildlife began developing a new method for designing culverts called the "stream simulation" method. That method is described in Exhibit AT-121 (W-089-B), *Design of Road Culverts for Fish Passage* (WDFW, 2003). Other entities, including the U.S. Forest Service, have developed and use similar "stream simulation" culvert design methodologies. *See* Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings, May 2008 (AT-119). "Stream simulation" culverts are designed to create or maintain natural stream processes within the culvert. To accomplish that objective, all stream simulation designs dictate that a culvert should be at least as wide as bank-full width plus a buffer. Each agency calculates the width of the buffer slightly differently but the required culvert size is not significantly different.

3.39 No state, federal or tribal manual or regulation requires the use of stream simulation in the design, construction, or maintenance of culverts, although many agencies prefer the use of stream simulation culverts in anadromous fish bearing streams.

3.40 The Washington Department of Fish and Wildlife ("WDFW"), along with federal agencies such as National Marine Fisheries Service ("NMFS") and United States Forest Service ("USFS"), currently recommends use of the stream simulation method, and the State uses it in some culvert replacement projects.

3.41 At this time, the stream simulation method of culvert design as described in *Design of Road Culverts for Fish Passage* (WDFW, 2003) (Exhibits AT-121 and W-089-B), as well as the version developed by the U.S. Forest Service, *see* Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings, May 2008 (AT-119), represents the best science currently available for designing culverts that provide fish passage and allow fluvial processes.

3.42 In most places, the stream simulation culvert design method provides effective transport of sediment.

3.43 Culverts designed to result in predetermined water velocities or depths at predetermined flows are known as "hydraulically designed" culverts.

3.44 The hydraulic design criteria in Table 1 of WAC 220-110-070(3) (Exhibit W-089-F) include

criteria intended to permit passage by a 6-inch adult trout.

3.45 The State uses the adult trout criteria from Table 1 of WAC 220-110-070(3) (Exhibit W 089-F) when designing hydraulically designed culverts for juvenile salmon passage.

3.46 The hydraulic design criteria in the adult trout portion of Table 1 of WAC 220-110-070(3) establish a maximum permissible change in water surface elevation at or above the culvert outlet of 0.8 foot.

3.47 For culverts built in fish-bearing waters, WDFW regulations at WAC 220-110-070(3) (Exhibit W-089-F) also permit culverts in small streams using a "no-slope" design method in which the culvert is placed on a flat gradient and is partially buried in the streambed. The WDFW no-slope design method for fish passage is accepted by the National Marine Fisheries Service under the Endangered Species Act for use only in very small streams where the natural slope is less than 3 percent and the culvert length is less than 80 feet, among other limitations. The Tribes have been involved in at least one barrier correction involving the no-slope design.

STATE CULVERTS

3.48 Washington State law has long required that obstructions across or in streams be provided with a durable and efficient fishway, maintained in an effective condition and continuously supplied with sufficient water to freely pass fish.

3.49 As early as 1881, Washington residents recognized the need to preserve fish access to habitat

and passed laws to prohibit the construction of human-made barriers.

3.50 In 1949, the Washington Department of Fisheries issued a publication noting that salmon spawning areas are constricted by major obstructions such as dams and minor obstructions such as barrier culverts. In 1950, the Attorney General of Washington published an Attorney General's Opinion, AGO 1950 No. 304, stating that highway culverts are subject to the Washington State law requiring fish passage at stream obstructions.

3.51 The principal State road- and land-managing agencies, and consequently the principal agencies responsible for state-owned stream crossing culverts, are Washington State Department of Transportation ("WSDOT"), Washington Department of Natural Resources ("WDNR"), WDFW and State Parks. WSDOT is not the principal land-owning agency in the Case Area.

3.52 The WSDOT is the State agency responsible for constructing and maintaining State Highways so that, when the highways cross fish bearing streams, fish passage is not obstructed.

3.53 The WDNR manages State trust lands within the Case Area and it manages an extensive network of roads on those lands, many of which cross streams bearing salmon.

3.54 The WDFW owns or manages Wildlife Areas and other lands in the Case Area that contain roads that cross streams bearing salmon. Some of the streams are routed through culverts under these roads.

3.55 In the early 1990's WSDOT commenced a project with the WDFW to identify barrier culverts under State highways.

3.56 In 1997 the State initiated efforts to identify and correct barrier culverts on lands owned or managed by WDFW.

3.57 In 1998 the State initiated efforts to identify and correct barrier culverts owned by the WDNR and located on its forest lands.

3.58 The State began an effort to identify barrier culverts on State Parks' lands in 2001.

3.59 State Parks hired WDFW to identify barrier culverts on its lands within the Case Area, but the contract has expired.

3.60 WDNR differed from the other state agencies (WDFW, WSDOT, and State Parks) in the way it assessed fish bearing streams.

3.61 The WDFW maintains a database called the Fish Passage and Diversion Screening Inventory database (FPDSI) that contains data from culvert inventories that WDFW has conducted or that other governmental and private entities have submitted to WDFW. The WDNR maintains a separate database for its culverts. The State has not generated a consolidated list of barrier culverts owned by the different State agencies.

3.62 Because the FPDSI is a live database that is regularly edited and updated, inventory numbers relate only for a specified date. Inventory numbers also depend on distinguishing between numbers of barriers, which may include structures other than culverts; numbers of sites, which may include more

than one culvert; and between sites that affect "fish," "anadromous fish," which include bull trout, sea run cutthroat trout, and kokanee or just "salmon."

3.63 As of March 2009, the WDFW culvert database showed 1215 anadromous and resident fish passage barrier culverts under WSDOT roads in the Case Area. Of these, 807 barriers had more than 200 meters of anadromous salmonid habitat upstream. Included within the 807 barrier culverts are some 20-30 sites that are barriers only to bull trout, sea run cutthroat trout, or kokanee.

3.64 In December 2000, WDNR completed its formal inventory efforts to identify barrier culverts at stream crossings on its forest roads statewide within lands that it owned as of that year. Since that date, WDNR has not conducted a formal culvert inventory.

3.65 The initial WDNR barrier culvert inventory, completed in 2001, identified potential barrier culvert sites using road maps and stream location maps that contain inaccuracies and omissions of both streams and roads.

3.66 Because of assumptions made during the WDNR inventory process, WDNR's barrier culvert inventory included some culverts on streams that do not have fish, and excluded some blocking culverts where salmon are present. WDNR, Plaintiff Tribes and others have identified additional fish-bearing streams on WDNR lands, and additional barrier culverts under WDNR roads, which were not identified during WDNR's formal inventory.

3.67 As part of its program to consolidate its upland holdings in the state, WDNR sells, purchases

or exchanges forestlands on a monthly basis. When WDNR adds to, reduces, or exchanges its upland holdings, it affects both the number of roads and culverts beneath those roads. These additional culverts undergo a preliminary assessment for fish passage during the exchange appraisal process and are included in WDNR's inventory once the purchase or exchange is finalized.

3.68 Following the completion of WDNR's culvert inventory in 2001 and taking into account adjustments to the inventory, WDNR identified 860 culverts within the Case Area to remediate because they were barriers to either resident or anadromous fish. As of April 2009, the WDNR culvert database showed 455 remaining culverts that are barriers to either resident or anadromous fish under roads it manages on lands within the Case Area. As of April 2009, WDNR has identified 228 culverts within the Case Area which are anadromous barriers.

3.69 In 2007, WDFW completed its efforts to identify barrier culverts at stream-road crossings on lands it owns or manages in the Case Area except for some water access sites and lands WDFW acquired within the past 2 years. Because its initial inventory has not been fully completed statewide, WDFW has not yet developed a plan for reassessing WDFW-owned culverts that WDFW has previously determined to be passable.

3.70 As of March 2009, the WDFW culvert database showed 89 fish passage barrier culverts on State Parks lands within the Case Area, of which 28 have at least 200 meters of salmon habitat both

upstream and downstream. State Parks has corrected one of its barrier culverts in the Case Area.

3.71 As of July 2009, WDFW had identified 71 fish passage barrier culverts under roads on its lands in the Case Area, of which 51 have at least 200 meters of salmon habitat both upstream and downstream.

CULVERT INVENTORY, ASSESSMENT, AND PRIORITIZATION

3.72 Before 1998, to determine whether a culvert passed fish, the State relied upon the professional judgment of biologists and engineers. In the 1990s, the WDFW published a standardized methodology for assessing culverts for fish passage. The most recent version is entitled *Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* (WDFW 2000) (Exhibits AT-051 and W-087-E) (hereinafter referred to as WDFW's *Assessment Manual* (2000)). Some Tribes and federal agencies have used the WDFW methodology to assess culverts for fish passage.

3.73 Since 1998, to determine whether a culvert meets the maximum velocity and other requirements of WAC 220-110-070 (3)(b)(ii) (Exhibit W-089-F), WDFW has relied on evaluation of physical characteristics of the culvert. WDFW refers to this as a "Level A" barrier assessment. This assessment is described in WDFW's *Assessment Manual* (2000) (Exhibits AT-051 and W-087-E).

3.74 In some cases, WDFW considers physical characteristics of the culvert insufficient by themselves to assess barrier status. In such cases it assesses the potential barrier using hydraulic

calculations, known as a "Level B" analysis. This assessment is described in WDFW's *Assessment Manual* (2000) (Exhibits AT-051 and W-087-E).

3.75 Level B barrier assessment requires a determination of the area of drainage basin upstream of the culvert. Level B assessment is difficult or impossible in many cases, particularly for sites within floodplains or tidal streams or having multiple parallel culverts, or culverts set at an unusual gradient.

3.76 Because streams are dynamic in nature, periodic re-assessment or monitoring of culverts is necessary.

3.77 WDFW uses the hydraulic criteria for adult trout in Table 1 of WAC 220-110-070(3) (Exhibit W-089-F) to determine whether or not a culvert is a barrier to juvenile salmon.

3.78 The WDFW developed the Priority Index methodology as a tool for organizing information, to help decision-makers prioritize culverts for correction. It is not law. Although the State calculates Priority Index values for many of its barrier culverts, those values do not control the order in which culverts are repaired and do not represent a "priority list." Other factors may cause a culvert with a lower PI score to be corrected before a culvert with a higher PI score.

3.79 In its initial inventory completed in 2001, WDNR determined Priority Index values ("PI values") for barrier culverts. WDNR has not updated those values subsequently, nor has it determined PI values for barrier culverts that were not identified in the initial inventory.

3.80 Each of WDNR's regions has its own protocols that it follows to reassess habitat.

3.81 Because of the time and expense associated with determining habitat gain in the field, WDNR has used a GIS-based process to calculate the habitat gain. Since 2001, WDNR regions have used the RMAP process and their own prioritization methods to determine when barriers will be removed.

3.82 WDNR does not have direct knowledge of all of the culverts located upstream or downstream of its culverts.

3.83 The relative location (upstream or downstream) of barrier culverts in relation to one another is not uniformly maintained in the State's Fish Passage and Diversion Screening Inventory (FPDSI) database.

3.84 The WDFW, under a contract with WSDOT, has been assessing the extent and condition of habitat above and below WSDOT barrier culverts in order to help prioritize corrections.

3.85 As of October, 2009, the WDFW estimated that it will complete its habitat assessments and prioritization for all WSDOT barrier culverts in the Case Area by January 2013, assuming present staffing levels. Priority Index values have not been calculated for every fish barrier. In the absence of complete habitat assessment information, it is possible to create a Surrogate PI (SPI) using Geographic Information Systems (GIS) data. WDFW sometimes uses surrogate PIs to decide where to focus habitat assessment efforts before identifying projects for scoping.

3.86 Fishery scientists use marine survival rates to annually estimate how many Coho salmon smolts will survive to enter fisheries as adults. These annual estimates of adult abundance, by stock, are compared to the average stock abundance during the FRAM Coho Base Period and that proportion is used in annual pre-season modeling – designated as a stock specific "Abundance Scalar". These stock scalars vary from year to year as they reflect both the environmental conditions that produced the out-migrating smolts (freshwater survival) and the resulting adults (marine survival).

STATE CULVERT CORRECTION PROGRAMS

3.87 In 1990, WDFW and WSDOT executed a Memorandum of Understanding Concerning Compliance With the Hydraulic Code (Exhibits AT-153 and W-087-B). Among other things, the agencies agreed to conduct an inventory of fish passage barriers on WSDOT rights-of-way.

3.88 In 1997, the Washington State legislature created the Fish Passage Task Force.

3.89 In December 1997, the Fish Passage Task Force reported to the State legislature that fish passage barrier culverts are a "key factor" in the wild salmon equation. It concluded that "Clearly, the creation of new barriers must be prevented and the rate of barrier correction must be accelerated if Washington wild salmon and trout stocks are to recover." Since 1997, the state agencies have identified fish passage barriers under their roads and have accelerated the rate of correction of such barriers.

3.90 The WDFW and State Parks each have asserted a goal of correcting their barrier culverts by July 2016.

3.91 The State currently has set no deadline for the WSDOT to correct all of its barrier culverts.

3.92 The primary factor determining the rate at which the State can correct fish barrier culverts is the level of funding for such corrections.

3.93 The WDFW determines that a barrier culvert is "corrected" when it has been removed, replaced or modified in such a way as to meet the hydraulic design criteria of WAC 220-110-070(3) (Exhibit W-089-F).

3.94 According to the WDFW *Assessment Manual* (Exhibits AT-051 and W-087-E), "A significant reach is defined as a section of stream having at least 200 linear meters of useable habitat without a gradient or natural point barrier. . . . An exception to the significant reach threshold may occur if high quality . . . habitat exists upstream of the barrier in anadromous waters."

3.95 WSDOT-owned culverts that are fish passage barriers are largely remediated through two different funding structures. First, fish barriers can be remediated as part of a capital construction project when the barriers fall within the boundaries of a highway construction project. This funding comes from the capital part of the Transportation budget. Second, fish passage barriers can be addressed with funding from the WSDOT I-4 (aka, Environmental Retrofit) budget.

3.96 WSDOT and WDFW have agreed pursuant to a Memorandum of Agreement (W-093-G) that barrier culverts shall be corrected as part of a highway project when in-stream work at the site of the culvert requires that WSDOT obtain a Hydraulic Project Approval ("HPA").

3.97 The Washington State Salmon Recovery Funding Board has no record of WSDOT ever receiving grant award funds towards a culvert or fish passage project.

3.98 WDFW has received grants for culvert inventory work, but as of January 2009, not for culvert correction or monitoring.

3.99 About 20% of WDNR's barrier remediation projects have been accomplished by requiring timber purchasers to correct culverts as part of a timber sale contract. WDNR pays for corrections to its barrier culverts not remediated by timber purchasers principally through fees on timber sales that are credited to the Access Road Revolving Fund ("ARRF Fund"). The ARRF Fund is a non-appropriated account managed by the WDNR to maintain, repair, and reconstruct access roads, or public roads used to provide access to public lands. RCW 79.38.050. WDNR also uses grant funds and FEMA funds to correct small numbers of culverts.

3.100 For the biennia covering the period from 2007-11, WDNR did not request any appropriations of general funds from the State legislature for correction of barrier culverts on state-owned trust lands. WDNR requested such funds in its proposed budget for the 2005-2007 biennium and in prior biennia for other road maintenance work, but the requested funds were

not appropriated by the legislature. WDNR requested and received general fund monies for seven barrier culvert remediation projects on non-trust lands dedicated to conservation (called Natural Area Preserves and Natural Resource Conservation Areas).

3.101 The funding available from the ARRF Fund for culvert corrections, and the number corrected as part of timber sales, depend in part on the volume and price of timber sold and harvested from WDNR lands.

3.102 Before 2001, WDNR had no deadline for correcting its fish passage barrier culverts.

3.103 Prior to 2006, the WDNR did not have sufficient funding to correct all of its barrier culverts by July 2016.

3.104 WDNR believes it will be able to correct its anadromous barrier culverts within the Case Area prior to July 2016, which is the deadline set by State law.

3.105 State agencies request separate appropriations for their operating and capital budgets. The budget requests for WDFW, WDNR and State Parks are made as part of the general budget and WSDOT's budget requests are included in a separate transportation budget. Funds for culvert work on lands or roads an agency manages may fall within its capital budget or its operating budget, or the transportation budget.

3.106 As of January 2009, WDFW reports that it has expended approximately $2,000,000 to fix state-owned barriers in the Case Area since 1999. WDFW includes dams, fishways as well as culverts in "state

owned barriers." Also included within the $2,000,000 was some post-construction monitoring.

3.107 WDFW has prepared a 10-year project planning document for correcting by July 2016 its statewide fish passage barriers.

3.108 The WDNR has determined the average cost of remediating its barrier culverts as follows:

a) no slope design method: $41,000

b) stream simulation design method: $54,000

c) bridge: $123,000.

The average of all three types of structures is approximately $81,000. However, none of those figures includes costs for the engineering related to the design of the replacement structure, which are typically around 10% of the total project cost. WDNR estimates the average cost to remove a culvert from a forest road that is being abandoned is $13,000.

3.109 WDFW estimates that the average cost to correct its fish passage barriers is $230,000 in 2008 dollars.

3.110 In the transportation budget, the State legislature may re-appropriate funds not expended by the end of the biennium. Such re-appropriations are made at the subprogram level and are not project specific.

3.111 WSDOT has tracked the costs of performing stand-alone barrier correction projects through its I-4 Environmental Retrofit program. WSDOT has not been able to track the costs of corrections undertaken as part of a larger highway improvement project because the barrier replacement

costs are not easily segregated from the cost of the rest of the project. For example, documentation of the costs of cement is typically for the entire project, without an easy way to extract how much was exclusively used for the culvert construction.

3.112 The funding source (federal versus state), the bidding environment, and labor laws can all affect the cost of the project.

3.113 The Washington State Legislature could designate specific additional revenue sources for fish passage barrier remediation in a manner similar to the current "Nickel" (5 cent per gallon special gasoline tax) or Transportation Partnership Act ("TPA") (9.5 cent per gallon special gas tax) programs either as additional programs or when the current Nickel and TPA programs expire.

3.114 The State Legislature could reprioritize some portions of the Transportation Budget to increase funding for fish passage barrier remediation, but only at the expense of other projects and responsibilities.

3.115 Current bidding on WSDOT construction projects is typically running 15 to 20 per cent lower than the WSDOT engineers' pre-bid estimates of project costs.

3.116 WSDOT highway construction projects are categorized as either improvement or preservation programs within the state transportation budget. WSDOT improvement projects are aimed at correcting specific deficiencies within the transportation system or network. WSDOT's improvement program consists of both safety and

mobility projects. WSDOT preservation projects are aimed at preserving at-risk roads and bridges.

3.117 In addition to the fish passage retrofit barrier program, both the chronic environmental deficiencies (CED) program and the stormwater retrofit program provide benefits to fish survival. Chronic environmental deficiencies are locations along the state highway system where recent, frequent, and chronic maintenance needs are causing impacts to fish and fish habitat. An example of a CED is erosion of a road prism from a stream close to a state highway.

3.118 WSDOT mobility projects typically consider barrier corrections when known and when HPAs are required. Since 1991, WSDOT has completed 143 fish passage projects statewide in the course of Transportation projects, of which 32 require additional work to meet current passage criteria.

3.119 Culverts owned by WDNR, WDFW and State Parks are generally found underneath narrow unpaved roads which carry a smaller amount of traffic compared to the average state highway. For these reasons, the cost of correcting these culverts is less than the cost of correcting culverts under state highways.

3.120 The budget for WSDOT is largely funded from the 37.5 cents per gallon gas tax. The projected revenue from the gas tax for the 2009-2011 biennium based on the March 2009 forecast is $2.653 billion. This tax is directed into the Motor Vehicle Fund for disbursement. An additional $373 million is projected to be collected from licenses, permits, and fees that is available to be paid into the Motor Vehicle Fund.

3.121 The net disbursement of the 37.5 cents per gallon tax is as follows: 9.5 cents is dedicated to projects specified in the Transportation Partnership Act ("TPA") that was enacted in 2005. The 9.5 cent TPA tax was enacted with restrictions that the revenue raised by the tax can only be spent on projects that have been specified and approved by the legislature. Another 5 cents of the gas tax is dedicated to the projects specified by the Legislature when the Nickel tax was passed. The Nickel tax is scheduled to sunset when the projects specified by the Legislature have been completed and the bond debt has been retired. The cities and counties receive 11 cents from the gas tax revenue. Another 4 cents of the gas tax revenue is dedicated to paying bond debt.

MONITORING AND MAINTENANCE

3.122 Culverts have a hydraulic design life of 30 to 80 years, depending on their material and other factors.

3.123 All culverts will require some level of maintenance during their useful life to ensure hydraulic function.

3.124 The parties are unaware of any studies that have estimated or determined the rate at which currently passable culverts may become fish passage barriers in the future or identified methods for estimating or determining such rates.

3.125 Culverts that are not fish passage barriers when installed may become barriers over time due to erosion, hydrologic changes, and other natural processes.

3.126 WDFW monitors WSDOT barrier culvert correction projects built with dedicated funding for one year after construction. WDFW conducts spawner surveys on some culverts that have been corrected to verify that adult salmon are getting through the new structure and spawning upstream of it. Projects that failed to meet fish passage criteria are listed as barriers in the Fish Passage and Diversion Screening Inventory database and/or scoped and programmed for correction along with other barriers.

3.127 The Forest Practices Rules require WDNR to maintain fish passage in its culverts. After major storm events, WDNR visually inspects large culverts for damage.

3.128 Fishways are formal structures that include specific features to optimize fish-passage conditions, providing maximum vertical gain over a given distance. Fishways applied at culverts typically consist of a series of pools separated by weirs that control the elevation differential between pools.

3.129 Fishways require regular inspection and maintenance.

3.130 WSDOT contracts with WDFW to inspect its fishways.

SALMON RECOVERY EFFORTS

3.131 The WDFW has recognized that culverts must be corrected in order to accomplish the State's salmon recovery efforts and to comply with several laws including fish passage laws and the new Forest Practices Rules.

3.132 The State Salmon Recovery Funding Board has worked with Indian Tribes and others to

correct fish passage barrier culverts with the result that habitat previously inaccessible to fish has become accessible. Since 1999, the SRF Board has awarded funds for salmon habitat restoration projects, such as placement of large woody debris, planting of riparian vegetation, and removal of fish passage barrier culverts. The primary sources of SRF Board funding are the Washington State Legislature and the federal Pacific Coastal Salmon Recovery Fund.

3.133 None of the recovery plans identified in the Statewide Strategy to Recover Salmon, *i.e.*, recovery plans for Puget Sound Chinook; Hood Canal Summer Chum; Lower Columbia Chum; Lower Columbia Steelhead; Lower Columbia Chinook; Lower Columbia Coho; Middle Columbia Steelhead; Upper Columbia Steelhead; Upper Columbia Chinook; Snake River Spring Chinook; and Snake River Steelhead, obligate any party other than the National Marine Fisheries Service and thus are neither enforceable nor regulatory.

3.134 The federal government provides some of the funds spent by the State for correction of barrier culverts and for other salmon recovery activities. Much of the grant money awarded by the Salmon Recovery Funding Board comes from the Pacific Coastal Salmon Recovery Fund. Tribes have been the recipients of some of these funds. Pretrial Order, Dkt. # 614, pp. 5-30.

This concludes the admitted facts. The Court further finds as follows:

4. At the time of trial in 2009, WDFW had identified 807 WSDOT barrier culverts which blocked more than 200 meters of salmon habitat upstream of

the culvert. Admitted Fact 3.63. Fisheries scientists have identified approximately 1,000 miles of stream, comprising nearly 4.8 million square meters of stream habitat upstream of blocked culverts. State Exhibit AT-323. This habitat is unavailable to salmon moving upstream to spawn.

5. The correction of human-caused barriers is recognized as the highest priority for restoring salmon habitat in the Case Area. Declaration of Mike Henry, Ex. AT-004.

6. Fish, especially salmon, continue to be an important part of the Tribes' history, identity, and culture.

7. Salmon abundance has declined precipitously from treaty times, but particularly in the last few decades. Numerous salmon stocks that originate or are fished in the Case Area have been listed as threatened or endangered under the Endangered Species Act ("ESA"). These stocks include Puget Sound Chinook, Lower Columbia River Chinook, Ozette Lake Sockeye, Puget Sound Steelhead, and Hood Canal Summer Run Chum.

8. Both treaty and non-treaty harvests have declined substantially since the time of the first decision in *U.S. v. Washington*, 384 F. Supp. 312 (W.D. Wash. 1974) ("Boldt Decision").

9. The decline in abundance of salmon has greatly reduced fishing opportunities for the Tribes. Tribal members have been forced to greatly limit the amount of time they fish, and the areas fished. The reduced fishing opportunity has contributed to a

decline in the number of tribal members who are now engaged in the traditional activity of fishing.

10. The reduced abundance of salmon and the consequent reduction in tribal harvests has damaged tribal economies, has left individual tribal members unable to earn a living by fishing, and has caused cultural and social harm to the Tribes in addition to the economic harm.

11. Tribal members learn fishing skills from older members of the Tribe. Reduced fishing opportunities interfere with the learning process for younger fishermen and women.

12. Reduced salmon harvests interfere with the Tribes' traditional First Salmon Ceremonies, which traditionally utilize fish from local streams. Tribal members are also less able to provide salmon for other ceremonies such as naming ceremonies, weddings, and other gatherings.

13. The Tribes are at present unable to harvest sufficient salmon to meet their needs and provide a livelihood for those tribal members who desire to fish for salmon for a living.

14. Salmon production is directly related to the amount and quality of habitat available. Loss and degradation of habitat have greatly reduced salmon production in the Case Area.

15. Cyclical patterns in ocean conditions and other natural disturbances cannot account for the persistent, long-term downward trend in Case Area salmon populations.

16. Reductions in salmon harvests by tribal and non-tribal fishers, leaving more adult fish to spawn,

will not result in substantial increases in salmon production unless accompanied by gains in habitat, particularly spawning ground.

17. A fish passage barrier culvert is a culvert that impedes the passage of any life stage of any species of anadromous fish at any flow level which would allow the passage of fish, but for the culvert. This includes all culverts identified as barrier culverts under the 2000 WDFW Barrier Assessment manual.

18. The Washington Administrative Code ("WAC") contains rules and expresses policies governing state agencies. WAC 220-110-010 under the Hydraulic Code Rules states that it is the intent of WDFW to provide protection for all fish life through a statewide system of "consistent and predictable rules." The technology provisions of WAC 110 represent "common provisions for the protection of fish life for typical projects proposed to the department." *Id.* The regulations represent "the best available science and practices related to protection of fish life." *Id.*

19. WAC regulations applicable to the Washington Forest Practices Board provide that "[t]o protect water quality and riparian habitat, roads must be constructed and maintained in a manner that will prevent potential or actual damage to public resources." WAC 222-24-010(2). This "will be accomplished by constructing and maintaining roads so as not to result in the delivery of sediment and surface water . . . in amounts that preclude achieving desired fish habitat and water quality" and by "providing for fish passage at all life states" (referring to the WDFW Hydraulic Code). *Id.*

20. Fish passage barrier culverts have a negative impact on spawning success, growth and survival of young salmon, upstream and downstream migration, and overall production. According to "Extinction is Not an Option: Statewide Strategy to Recover Salmon" (September 1999),

> Unnatural physical barriers interrupt adult and juvenile salmonid passage in many streams, **reducing productivity and eliminating some populations**. Barriers may also cause poor water quality (such as elevated temperature or low dissolved oxygen levels) and unnatural sediment deposition. Impaired fish access is one of the more significant factors limiting salmonid productivity in many watersheds.
>
> Fish blockages or barriers are caused by dams, culverts, tide gates, dikes, and other instream structures. . . . **These structures block fish access to an estimated 3,000 miles of freshwater spawning and rearing habitat.**
>
> Ex. AT-114, at II.17-18 (emphasis added).

21. Young salmon, which do not have the swimming power of adults, are more easily blocked by barrier culverts. As a result, they may never migrate to the ocean, reach maturity, and return to spawn.

22. The negative effect of culverts is not limited to blocking actual passage of fish and preventing them from reaching spawning grounds. Improperly designed culverts may result in loss of spawning and rearing habitat due to shortening and simplification of the channel, loss of pools and other complex

habitats, elimination of riparian vegetation, changes in litter and food sources, improper filtration of sediment, and other adverse impacts on the stream. Testimony of Dr. Martin Fox, AT-001, p. 2.

23. Culverts may also cause negative effects on stream quality and fish habitat by altering the water velocity, which may cause sedimentation or erosion, and may ultimately result in a "perched" culvert which is a barrier to upstream fish movement. Red Cabin Creek on State Route 520 provides an example of a culvert filled with sediment. AT-010-8 to AT-010-12. A culvert blocked with sediment may divert water into adjacent ditches and channel, causing erosion and stranding fish, leading to additional mortality of adult and juvenile salmon. AT-010-13.

24. Culverts which are improperly designed, installed, or maintained may completely bar salmon from access and cause local extirpation of a run. Testimony of Mike McHenry, AT-004, p. 4. For example, Chinook salmon from Pysht River and Morse Creek on the Olympic Peninsula are locally extirpated. *Id.*, p. 3.

25. A 1994 analysis of loss of coho salmon production in the Skagit River watershed determined that 6% to 13% of the loss throughout the watershed was attributable to barrier culverts. When tributaries alone were analyzed, 44% to 58% of the loss of salmon production was attributable to barrier culverts. AT-010, p. 10.

26. Culverts which do not allow the downstream movement of woody debris and sediment have a negative impact on the downstream spawning grounds and general stream habitat. Such culverts

also may become blocked with debris and fail during high water events, causing severe erosion and damage to habitat downstream. The effect on salmon populations can be "devastating." Testimony of Lawrence Wasserman, AT-010, p. 28.

27. State-owned barrier culverts are so numerous and affect such a large area that they have a significant total impact on salmon production. WDFW categorizes culverts as blocking "significant habitat" when there is at least 200 meters of inaccessible habitat upstream of the culvert. As of the trial date in 2009, there were 1,114 state-owned culverts in the Case Area, including at least 886 that blocked "significant habitat," including 807 such culverts under roads built or maintained by WSDOT, 28 under the control of State parks, and 51 under the control of WDFW. WDFW records showed at that time that State-owned barrier culverts blocked salmon access to an estimated 1,000 miles of stream and nearly five million square meters of habitat. Admitted Facts 3.64 - 3.71. A WSDOT spreadsheet inventory of the culverts and the amount of spawning and rearing habitat blocked by each appears in the record at AT-323.

28. In the year of the trial and two following years, 2009 - 2011, WSDOT completed twentyfour barrier culvert replacement projects. Tribes' Post-Trial Supplemental Brief, Dkt. # 751, p.5; Declaration

of Alix Foster, Dkt. # 749, Exhibit A, pp. 8-15.[2] Tables 5 and 7 in the WSDOT *Fish Passage Barrier Inventory: Progress Performance Report* (July 2012) ("2012 Barrier Inventory") provide these figures for Regions 1, 2, and 3 (Northwest, North Central, and Olympic Regions). (Twenty-five projects are listed for the years 2009 - 2011, but one, at Wagley's Creek, is a dam removal rather that replacement of a culvert.) At this rate of eight projects per year, assuming no new barrier culverts were to develop, it would take the State more than 100 years to replace the "significantly blocking" WSDOT barrier culverts that existed in 2009.

29. Estimates based on an assumption of no new barrier culverts are unsound, as new barrier culverts have in fact been identified since 2009. WSDOT reported 1,158 fish passage barrier culverts in the Northwest and Olympic Regions in 2009. *See*, WSDOT *Fish Passage Barrier Inventory: Progress Performance Report* (July 2009) ("2009 Barrier

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[2] This supplemental brief and supporting declarations were filed at the Court's direction. The Court requested supplemental memoranda of the parties to address changes in the facts that may have occurred since the time of trial. The Declaration of Alix Foster presents facts that appear in the WSDOT *Fish Passage Inventory Progress Performance Report* (July 2012), a State document of which the Court may take judicial notice. The document is available online at www.wsdot.wa.gov/ and a copy of this document is attached as Attachment B to this Order.

Inventory"), AT-072, p. 7. The 2012 WSDOT report lists a total of 1,236 fish passage barriers culverts in these same two regions. The number of barriers with significant habitat gain in these two regions alone has **increased** from 883 to 930. *Compare*, Table 2 in the 2009 Barrier Inventory with Table 2 in the 2012 Barrier Inventory (attached as Attachment B to this Memorandum and Order).

30. According to the Declaration of Paul Wagner filed in support of the State's supplemental memorandum, WSDOT works with WDFW to reassess barrier culverts. This reassessment leads to the statewide totals reported in the 2012 Barrier Inventory. Declaration of Paul Wagner, Dkt. # 746, ¶ 8. As of the date of that report, the total number of WSDOT fish passage barriers, state-wide, was 1,988, of which 1,519 were barriers with significant habitat gain. *Id*; 2012 Barrier Inventory, Table 2. Of the 1,519 barriers with significant habitat gain, 817 lie within the Case Area. *Id.*, ¶ 8.

31. The increase in the total number of WSDOT barrier culverts has occurred despite the fact that twenty-four barrier culverts in the Case Area have been corrected since 2009. Extrapolation from these data would lead to the untenable conclusion that under the current State approach, the problem of WSDOT barrier culverts in the Case Area will never be solved.

30. WDFW and DNR have achieved greater success than WSDOT in constructing remedies for barrier culverts. From 2009 through 2012, WDFW remedied twenty-eight barrier culverts in the Case Area, resulting in 46,415 linear meters of habitat gain

upstream of these culverts. Declaration of Julie Hennings, Dkt. # 744, ¶¶ 5, 9-10. This work was the result of appropriations to WDFW by the legislature of $1,000,000 for the 2009-11 biennium and $2,731,000 in the 2011-13 biennium. *Id.*, ¶¶ 9, 10. An additional $1,495,000 was appropriated in 2012 from the Jobs Now! Act to correct fish passage barriers on WDFW land, of which $810,000 was for correction of culverts within the Case Area. *Id.*, ¶ 10.

31. As of January 29, 2013, there remained fourteen culverts which blocked more than 200 meters of salmon and steelhead habitat on WDFW lands in the Case Area, and another five culverts which blocked less than 200 meters of anadromous fish habitat in the Case Area. Declaration of July Hennings, Dkt. # 744, ¶ 6.

32. From 2009 through 2012, DNR remediated 126 barrier culverts in the Case Area. Declaration of Alex Nagygyor, Dkt. # 740, ¶ 5. DNR has eighty-seven culverts which pose barriers to anadromous fish remaining at this time. *Id.*

33. Most of the funds available to DNR for correcting barrier culverts come from the Access Road Revolving Fund ("AARF"), which is derived from income from timber sales. *Id.*, ¶ 10. During the 2011 to 2013 biennium, DNR also received $5,700,000 from the State's Capital Budget (Building and Construction Account) for Road Maintenance and Repair Plan ("RMAP") work, which includes culvert repair. *Id.*, ¶ 11. DNR has received additional funds, totaling $4,000,000 from FEMA (Federal Emergency Management Agency). *Id*, ¶ 12.

34. State Parks has corrected one barrier culvert since the 2009 trial. Declaration of Deborah Peterson, Dkt. # 742, ¶ 7. It is estimated that twenty-three significant barrier culverts remain in the Case Area on land under the control of State parks. *Id.*, ¶ 5.

35. The State Forest Practice Board has promulgated regulations under the Forest Practices Act which provides that the goals for road maintenance and culvert replacement established in WAC 222-24-010 (set forth in relevant part above in FF 19) are "expected to be achieved by October 31, 2016." WAC 222-24-050. This regulation is binding on DNR and has been adopted by WDFW and State parks. *See,* Admitted Fact 3.90. The original date of July 1, 2016 has been extended to October 31, 2016. Declaration of Alex Nagygyor, Dkt. # 740, ¶ 15.

36. WDFW has stated its intention to remedy six of the remaining fourteen culverts which block more than 200 meters of upstream habitat before the 2016 deadline. *Id.*, ¶ 12. WDFW represents that the remaining eight culverts pose challenges such as interference with hatchery operations, or access issues, which it will discuss with the Tribes. *Id.*

37. If DNR maintains the rate of barrier correction that it has achieved over the past three years, the remaining eighty-seven barrier culverts will be corrected by the 2016 deadline. Declaration of Alex Nagygyor, Dkt. # 740, ¶ 16.

38. Correction of fish passage barrier culverts is a cost-effective and scientifically sound method of salmon habitat restoration. It provides immediate benefit in terms of salmon production, as salmon

rapidly re-colonize the upstream area and returning adults spawn there. Exhibit AT-004, p. 12.

39. Restoration of salmon runs through correction of State-owned culverts benefits both Tribal and non-Tribal fisherman.

40. Species listed under the Endangered Species Act (Puget Sound Chinook, Hood Canal summer chum salmon, and Puget Sound steelhead) are monitored by the National Marine Fisheries Service (NMFS). The data and conclusions are published in periodic status reviews. Plaintiff United States of America presented selected pages from the NMFS December 10, 2010 *Status Review Update for Pacific Salmon and Steelhead Listed under the Endangered Species Act.* Declaration of Yvonne Marsh, Dkt. # 736, Exhibit 1. The status report identifies risk factors for Puget Sound Chinook as "high fractions of hatchery fish in many populations and widespread loss and degradation of habitat." *Id.*, p. 2. Noting a recent decline in productivity of the Hood Canal summer chum salmon, the status report suggests that "improvements in habitat and ecosystem function [are] needed." *Id.*, p. 3. For Puget Sound steelhead, the status report makes the alarming observation that "steelhead in the Puget Sound DPS [distinct population segment] remain at risk of extinction throughout all or a significant portion of their range in the foreseeable future. . ." *Id.*, p. 4. The Biological Review Team identified "degradation and fragmentation of freshwater habitat, with consequent effects on connectivity, as a primary limiting factor and threat facing the Puget Sound steelhead DPS." *Id.*

41. NMFS is responsible for implementing Section 7 of the Endangered Species Act (ESA) for actions that affect habitat of threatened or endangered species. Federally funded or permitted actions by the State of Washington which affect anadromous fish, such as repair or replacement of culverts, require consultation with NMFS under Section 7 and, where the action potentially effects listed species, the preparation of a biological opinion. Declaration of Steven Landing, Dkt. # 737, ¶¶ 1-2. NMFS has issued programmatic biological opinions that address culvert repair and replacement by the State of Washington to streamline the process. If the project satisfies certain design criteria, the federal agency can issue a permit or provide funding without further Section 7 consultation with NMFS. *Id.*, ¶ 3.

42. On December 12, 2012, NMFS issued a programmatic biological opinion for the Federal Highway Administration (FHWA) and Army Corps of Engineers for the WSDOT's Preservation, Improvement, and Maintenance Activities program. This programmatic opinion covers projects conducted by WSDOT, including projects within the Case Area, which are funded by the FHWA, or permitted by the Corps, and include specified activities such as culvert repair and replacement. *Id.*, ¶ 5. There is an even more streamlined "fast track" process for projects that involve culverts which block passage of ESA-listed species. *Id.*, ¶ 6.

43. In order to qualify for these expedited permits, projects that replace culverts on streams with listed species must apply the WDFW stream simulation or no-slope design criteria. These design

criteria are relied upon by NMFS to ensure fish passage. *Id.*, ¶ 7.

44. The State of Washington has invested a great deal of time and money in developing the Fish Passage Priority Index referred to in FF 3.78. WSDOT has invested $3,800,00 for fish passage barrier inventory and prioritization since October, 2009. Declaration of Paul Wagner, Dkt. # 746, ¶ 6. In the 2009-2011 biennium, WSDOT and WDFW began to reassess culverts thought to have the highest likelihood of becoming barriers, in order to evaluate their current status. *Id.*, ¶ 8. This reassessment led to the July2012 statewide totals listed in FF 29-30. Nowhere in this declaration does Mr. Wagner connect the twenty-four culverts that were corrected by WSDOT within the Case Area in 2009 - 2011 (FF 28) with the assessment and prioritization process.

45. Only four of the twenty-four fish passage barriers corrected by WSDOT in 2009 - 2011 were among the 163 culverts identified by the State for priority in correction. *See,* State of Washington Post-Trial Brief, Dkt. # 663, p. 13-14; AT-323; 2012 Barrier Inventory, Tables 5 and 7.

46. Priority Index numbers range from 1 to 62. Declaration of Michael Barber, W-088, ¶ 12. The higher the number, the higher the priority to fix the culvert. As of 2009, most (but not all) WSDOT barrier culverts with a PI greater than 20, and no additional barrier culverts in the watershed, had been fixed. *Id.*

47. PI numbers for the twenty-four WSDOT culverts which were repaired or replaced in the Case Area in 2009 - 2011 ranged from 6.36 (Yarrow Creek tributary on SR 520) to 26.44 (Terrell Creek culvert

replacement on SR 542). 2012 Barrier Inventory, Tables 5 and 7.

48. The State of Washington asserted at trial that the average cost to replace a WSDOT culvert would be $2,300,000. However, the actual cost of construction for twelve WSDOT stream simulation culvert projects completed prior to the 2009 trial ranged from $413,000 to $1,674,411; the average cost for the twelve was $658,639 each. AT-101, *Fish Passage Projects Completed with Dedicated I-4 Funds.*

49. WSDOT has provided with its supplemental memorandum a table titled "WSDOT Barrier Correction Projects Completed since June 2010." Declaration of Paul Wagner, Dkt. # 746, Exhibit A. The table lists thirty-one barrier correction projects statewide, of which twenty-four used either the stream simulation design or a bridge. Mr. Wagner states that the average cost of these twenty-four WSDOT projects was $1,827,168. *Id.*, ¶ 9. However, it is difficult to confirm this figure from the tables, as eight of the stream simulation culvert projects, along with four of the "no-slope" design projects, have no cost listed. It appears these twelve are the ones described by Mr. Wagner as "constructed and funded as a part of other transportation projects." *Id.*, ¶ 5. See FF 3.111.

50. Full-span bridges across streams, and stream simulation culverts, offer superior fish passage and habitat benefits compared to hydraulic design and no-slope culverts. Stream simulation culverts are less likely than hydraulic design or no-slope culverts to become fish passage barriers in the future. Bridges or stream simulation culverts are the

preferred WSDOT choices. Declaration of Paul Wagner, Dkt. # 746, ¶ 9.

51. Of the fish passage barrier corrections undertaken by WSDOT since 1992, approximately two-thirds have been undertaken as part of a highway maintenance or improvement project, and one third have been "stand-alone" projects funded through the I-4 program.

52. A large portion of WSDOT's funding comes from the United States. According to documents provided with the supplemental memorandum, the State expects to receive over $22,000,000 for fish passage barrier projects from the federal government in the years 2011 to 2017. Declaration of Alix Foster, Dkt. # 749, Exhibit 12. Of this amount, $15,813,000 is expected in the 2013-2015 biennium.

53. Combined with the federal funding for fish passage barrier correction, the State anticipates another $14,425,000 from the 2005 Transportation Partnership Account, for a total of $37,387,000 for fish passage barrier correction in the years 2011-2017. *Id.*

54. The WSDOT budget is separate from the State of Washington operating budget and capital budget, as demonstrated in "A Citizen's Guide to Washington State: 2012 Transportation Budget." Declaration of Alix Foster, Dkt. # 749, Exhibit 10. According to this state document, for the 2011-2013 biennium, the State of Washington budget allocates $60.9 billion to the Operating Budget, $9.9 billion to the Transportation Budget, and $3.7 billion to the Capital Budget. *Id.* The Operating Budget funds day-to-day operations; the Capital Budget funds acquisition and maintenance of buildings and

facilities, including public schools and higher education facilities; and the Transportation Budget funds both operations and capital expenditures for transportation, including road building, maintenance, and repair. *Id.*

55. Of the $9.9 billion budgeted for transportation, $7.88 billion is allocated to WSDOT. *Id.*

56. The separation of the Transportation Budget from the Operating and Capital budgets ensures that money will not be taken from education, social services, or other vital State functions to fund culvert repairs.

57. The largest source of revenue for the Transportation Budget is the state gas tax, which is predicted to comprise 46.4% of the revenue available to transportation services in the 2011 - 2013 biennium. Transportation Revenue Forecast Council: November 2012 Transportation Economic and Revenue Forecasts; Declaration of Alix Foster, Dkt. # 749, Exhibit 11, Figure 2. Under the Washington State Constitution, the gas tax revenue must be devoted exclusively to transportation needs, including correction of barrier culverts under State highways.

58. Total transportation revenues are expected to rise in the years 2012 - 2016, compared to 2008 - 2012. *Id.*, Figure 1. The Fiscal Year 2013 increase in revenue is 5.6% over FY 2012. *Id.* Continued growth is predicted at an annual rate of 1.2% per year over the next ten years. *Id.*

59. Much of this increased funding for transportation could be used to correct WSDOT

barrier culverts at a faster rate than has been maintained previously.

60. There is no evidence that increased funding toward correction of barrier culverts to meet the State's obligations under the Stevens Treaties will compromise safety or mobility programs also funded by the State's Transportation Budget.

CONCLUSIONS OF LAW

1. The Court has jurisdiction over the parties and the subject matter pursuant to Paragraph 25 of the Permanent Injunction, as amended August 11, 1993 ("Paragraph 25"). *U.S. v. Washington*, 384 F. Supp. 312, 419 (W.D. Wash. 1974); C70-9213, Dk.t # 13599. Pursuant to this section, the Court has continuing jurisdiction to determine "whether or not the actions, intended or effected by any party. . . are in conformity with Final Decision #1 or this injunction. . . ." Paragraph 25(a)(1). The construction, maintenance, repair and replacement of culverts are actions effected by the State of Washington which may be evaluated for conformity with Final Decision # 1. The Court also has jurisdiction to consider "[d]isputes concerning the subject matter of this case which the parties have been unable to resolve among themselves," and [s]uch other matters as the court may deem appropriate." Paragraph 25(a)(4), (7). The State and the Tribes have attempted to resolve this issue and have been unable to do so without Court involvement. The Court deems it appropriate to resolve the dispute at this time.

2. The scope of this subproceeding includes only those culverts that block fish passage under State-owned roads. Stipulation of Plaintiffs and State of

Washington Regarding Scope of Sub-Proceeding, Dkt. # 341, ¶ 1.

3. The Court is not limited in granting relief to requiring that culverts identified as blocking fish passage be repaired. The Court may use its equitable powers to formulate a remedy consistent with orders entered in this case. Stipulation, Dkt. # 341, ¶ 2.

4. This Memorandum and Decision incorporates all previous rulings in this subproceeding, including but not limited to rulings on waiver and estoppel, the inapplicability of constitutional defenses asserted by the State of Washington, and the declaratory judgment entered in favor of the Tribes on August 23, 2007. The State of Washington's motion for reconsideration of that ruling, set forth in the post-trial memorandum, is DENIED.

5. The Treaties were negotiated and signed by the parties on the understanding and expectation that the salmon runs were inexhaustible and that salmon would remain abundant forever. Finding of Fact ("FF") 1-2.

6. Salmon stocks in the Case Area have declined alarmingly since treaty times. A primary cause of this decline is habitat degradation, both in breeding habitat (freshwater) and feeding habitat (freshwater and marine areas).

7. One cause of the degradation of salmon habitat is blocked culverts, meaning culverts which do not allow the free passage of both adult and juvenile salmon upstream and downstream. Culverts which block the upstream passage of adult salmon returning

to spawn render large stretches of streambed useless for spawning habitat, and reduce the number of wild salmon produced in that stream. Culverts which block stream areas in which juvenile salmon rear may interfere with their feeding and escapement from predators. Culverts which block the passage of juvenile salmon downstream prevent these salmon from reaching the sea and attaining maturity.

8. Harvests of salmon have declined dramatically since 1985. Some stocks of native salmon have become so depleted that the species is listed as threatened or endangered.

9. Where culverts block passage of fish such that adult salmon cannot swim upstream to spawn and juveniles cannot swim downstream to reach the ocean, those blocked culverts are directly responsible for a demonstrable portion of the diminishment of the salmon runs.

10. The depletion of salmon stocks and the resulting diminished harvests have harmed the Tribes and the individual members economically, culturally, and personally. It is not necessary that the Tribes quantify the amount of loss in order to demonstrate their entitlement to relief from further harm.

11. Non-Tribal fishermen have also been injured economically and personally by the diminished salmon harvests.

12. The Eleventh Amendment to the United States Constitution does not bar the plaintiffs' claims for injunctive relief against the State of Washington.

13. Plaintiffs seeking a permanent injunction must satisfy a four-part test before the Court may grant such relief. The Tribes "must demonstrate (1) that [they have] suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the [parties], a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction". *Monsanto Co. v. Geertson See Farms, Inc.*, 130 S.Ct. 2743, 2756 (2010).

14. The Tribes have demonstrated, as set forth above in Findings of Fact 6 - 14, that they have suffered irreparable injury in that their Treaty-based right of taking fish has been impermissibly infringed. The construction and operation of culverts that hinder free passage of fish has reduced the quantity and quality of salmon habitat, prevented access to spawning grounds, reduced salmon production in streams in the Case Area, and diminished the number of salmon available for harvest by Treaty fishermen. The Tribes and their individual members have been harmed economically, socially, educationally, and culturally by the greatly reduced salmon harvests that have resulted from State created or State-maintained fish passage barriers.

15. This injury is ongoing, as efforts by the State to correct the barrier culverts have been insufficient. Despite past State action, a great many barrier culverts still exist, large stretches of potential salmon habitat remain empty of fish, and harvests are still diminished. Remedies at law are inadequate as monetary damages will not adequately compensate

the Tribes and their individual members for these harms. Salmon harvests are important to Tribal members not only economically but in their traditions, culture, and religion; interests for which there is no adequate monetary relief.

16. The balance of hardships tips steeply toward the Tribes in this matter. The promise made to the Tribes that the Stevens Treaties would protect their source of food and commerce was crucial in obtaining their assent to the Treaties' provisions. FF 2; citing *State of Washington v. Washington State Commercial Passenger Fishing Vessel Association*, 443 U.S. 658, 677 (1979). Equity favors requiring the State of Washington to keep the promises upon which the Tribes relied when they ceded huge tracts of land by way of the Treaties.

17. It was the intent of the negotiators, and the Tribes' understanding, that they would be able to meet their own subsistence needs forever, and not become a burden on the State treasury. Order on Cross-Motions for Summary Judgment, Dkt. # 392, p. 10. The Tribes' ability to meet their subsistence and cultural needs is threatened by the depletion of salmon stocks which has resulted from the continued existence of fish passage barriers. State action in the form of acceleration of barrier correction is necessary to remedy this decline in salmon stocks and remove the threats which face the Tribes. The State has the financial ability to accelerate the pace of barrier correction over the next several years and provide relief to the Tribes. FF 48 - 49; 51 - 59. Under state and federal law, barrier culverts must be corrected in any case. Any marginal costs attributable to an accelerated culvert correction schedule are more than

offset by the benefit that will accrue to the Tribes. Increased State spending on barrier correction will not adversely affect state programs such as education or social welfare, because the transportation and general operating budgets are separate. FF 54, 60.

18. The public interest will not be disserved by an injunction. To the contrary, it is in the public's interest, as well as the Tribes' to accelerate the pace of barrier correction. All fishermen, not just Tribal fishermen, will benefit from the increased production of salmon. Commercial fishermen will benefit economically, but recreational fishermen will benefit as well. The general public will benefit from the enhancement of the resource and the increased economic return from fishing in the State of Washington. The general public will also benefit from the environmental benefits of salmon habit restoration.

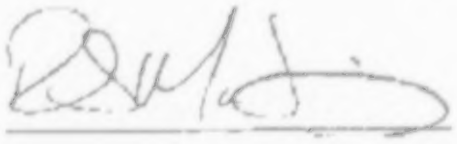
19. The State's duty to maintain, repair or replace culverts which block passage of anadromous fish does not arise from a broad environmental servitude against which the Ninth Circuit Court of Appeals cautioned. Instead, it is a narrow and specific treaty-based duty that attaches when the State elects to block rather than bridge a salmon-bearing stream with a roadbed. The roadbed crossing must be fitted with a culvert that allows not only water to flow, but which insures the free passage of salmon of all ages and life stages both upstream and down. That passage is best facilitated by a stream simulation culvert rather than the less-effective hydraulic design or no-slope culvert.

20. An injunction is necessary to ensure that the State will act expeditiously in correcting the barrier culverts which violate the Treaty promises. The reduced effort by the State over the past three years, resulting in a net increase in the number of barrier culverts in the Case Area, demonstrates that injunctive relief is required at this time to remedy Treaty violations.

CONCLUSION

The permanent injunction requested by the Tribes and joined by the United States is reasonable and sufficiently narrowly tailored to remedy specific harms. The Court shall accordingly GRANT the Tribes' motion for a Permanent Injunction (Dkt. # 660) and adopt the proposed Order presented by the Tribes.

Dated this 29th day of March 2013.



RICARDO S. MARTINEZ
UNITED STATES DISTRICT JUDGE

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, et al., Defendants.	CASE NO. CV 9213 Subproceeding 01-01 SUPPLEMENT TO MEMORANDUM AND DECISION

The attached documents, Attachments A and B, were referred to in the Court's Memorandum and Decision filed March 29, 2013. Dkt. # 752. The Clerk shall file these documents and link or attach them to the Memorandum and Decision.

Dated this 1st day of April, 2013.

RICARDO S. MARTINEZ
UNITED STATES DISTRICT JUDGE

Attachment A

70-CV-09213-EXH

Chart attached to Finding of Fact 3.12

Tribal harvest of salmon and steelhead in western and Puget Sound Rivers)				
YEAR	CHINOOK	CHUM	PINK	COHO
1974	91,006	173,059	25	463,647
1975	126,854	79,427	105,164	442,662
1976	156,710	298,652	42	341,618
1977	147,927	182,524	180,136	468,003
1978	163,525	503,599	74	469,006
1979	141,292	103,769	760,071	541,711
1980	191,021	465,746	332	889,663
1981	179,168	285,629	1,177,398	547,963
1982	180,574	473,382	78	930,687
1983	168,619	279,545	820,343	637,242
1984	181,452	403,509	68	582,857
1985	197,212	554,309	2,177,039	848,482
1986	178,692	663,659	113	1,023,625
1987	215,103	720,804	1,117,032	1,283,953
1988	239,931	889,485	67	880,889
1989	272,212	521,221	1,850,177	737,879
1990	249,115	570,984	301	806,175
1991	161,514	562,781	1,712,768	597,096
1992	132,372	778,892	121	399,307
1993	108,261	544,616	1,118,774	251,772
1994	89,067	793,891	214	450,734
1995	97,655	381,117	1,344,707	368,125
1996	95,080	260,790	54	263,320
1997	83,019	189,636	1,008,435	157,898
1998	73,023	318,678	515	188,857
1999	120,097	119,160	51,934	192,417
2000	84,230	156,069	349	446,770

Washington (Ocean, Coastal Rivers, Puget Sound from 1974-2007.			
SOCKEYE	STEELEHEAD		TOTAL
58,984	4,885		791,572
133,657	0	*	887,764
110,492	12,066		919,580
396,125	14,386		1,389,101
256,253	17,734		1,410,191
429,004	15,089		1,990,936
284,757	20,696		1,852,215
569,880	22,729		2,782,767
1,407,535	24,771		3,017,027
219,993	25,437		2,151,179
851,099	1,744		2,020,729
1,574,557	25,996		5,377,595
1,357,347	93,618		3,317,054
997,568	80,968		4,415,428
519,377	82,275		2,612,024
1,126,586	47,363		4,555,438
1,193,441	47,121		2,867,137
849,898	32,220		3,916,277
300,665	58,405		1,699,762
1,397,235	31,180		3,451,838
960,166	30,013		2,324,085
243,350	31,072		2,466,026
287,262	30,467		936,973
680,717	21,369		2,141,074
311,621	39,578		932,272
20,694	24,674		528,976
320,390	26,226		1,034,034

YEAR	CHINOOK	CHUM	PINK	COHO
2001	147,550	752,144	319,279	501,374
2002	150,522	839,450	277	387,861
2003	130,664	786,594	551,798	312,432
2004	166,327	929,308	699	653,737
2005	141,595	348,376	240,525	432,485
2006	148,072	764,032	368	325,596
2007	150,941	802,513	315,311	278,945
	CHINOOK	CHUM	PINK	COHO
Total	5,160,402	16,497,316	14,854,588	18,104,788

SOCKEYE	STEELEHEAD		TOTAL
170,408	38,847		1,929,602
356,883	23,292		1,758,285
220,617	23,280		2,025,485
149,640	32,056		1,931,767
141,038	28,598		1,332,617
541,322	26,261		1,805,651
5,494	30,937		1,584,141
SOCKEYE	STEELEHEAD		TOTAL
18,444,055	1,065,454		74,126,602

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Chart attached to Finding of Fact 3.25

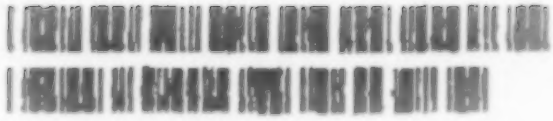
Presumed Tribal harvest of sockeye salmon in western Washington (Ocean, Coastal Rivers, Puget Sound and Puget Sound Rivers) from 1979-2005				
Year	Total Tribal Sockeye Harvest	Tribal Sockeye Harvest Presumed to be of Canadian Origin[1]	Tribal Sockeye Harvest Presumed to be of US Origin[2]	% of Tribal Sockeye Harvest Presumed to be of Canadian Origin
1979	429,004	392,106	36,898	91.40%
1980	284,757	191,487	93,270	67.25%
1981	569,880	537,713	32,167	94.36%
1982	1,407,535	1,369,176	38,359	97.27%
1983	219,993	186,434	33,559	84.75%
1984	851,099	789,625	61,474	92.78%
1985	1,574,557	1,539,197	35,360	97.75%
1986	1,357,347	1,348,343	9,004	99.34%
1987	997,568	959,925	37,643	96.23%
1988	519,377	371,951	147,426	71.61%
1989	1,126,586	1,118,007	8,579	99.24%
1990	1,193,441	1,175,911	17,530	98.53%
1991	849,898	838,033	11,865	98.60%
1992	300,665	289,401	11,264	96.25%
1993	1,397,235	1,361,993	35,242	97.48%
1994	960,166	955,767	4,399	99.54%
1995	243,350	241,907	1,443	99.41%
1996	287,262	222,992	64,270	77.63%
1997	680,717	675,487	5,230	99.23%
1998	311,621	305,909	5,712	98.17%
1999	20,694	20,215	479	97.69%

Year	Total Tribal Sockeye Harvest	Tribal Sockeye Harvest Presumed to be of Canadian Origin[1]	Tribal Sockeye Harvest Presumed to be of US Origin[2]	% of Tribal Sockeye Harvest Presumed to be of Canadian Origin
2000	320,390	258,788	61,602	80.77%
2001	170,408	162,680	7,728	95.47%
2002	356,883	299,261	57,622	83.85%
2003	220,617	177,751	42,866	80.57%
2004	149,640	111,733	37,907	74.67%
2005	141,038	137,688	3,350	97.62%

[1] Stocks in this category are predominantly Fraser River stocks that are of Canadian origin. This category is known to include a small amount of intermingled US origin (Baker River, Lake Washington, Misc.) stocks but their numbers are considered minor in comparison.

[2] Stocks in this category are predominantly Lake Washington. There are other minor US origin stocks that may not be accounted for in this table.

Attachment B



70-CV-09213-RPLY

Fish Passage Barrier
Inventory
July 2012
Washington State
Department of Transportation
Progress Performa
Report

Washington State Department of Fish and Wildlife

HABITAT PROGRAM
RESTORATION DIVISION

Progress Performance Report
For
WSDOT Fish Passage Inventory

July 2012

Washington State Department of Transportation

FISH PASSAGE BARRIER REMOVAL PROGRAM

This report is also available in a pdf format at http://www.wsdot.wa.gov/Environment/Biology/FP/fishpassage.htm .
Additional data can be obtained by contacting Fish and Wildlife Biologist, Eva Barber, e-mail: Eva.Barber@dfw.wa.gov, phone: (360) 902-2411

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INTRODUCTION

Background

The restoration of declining salmon and trout populations ranks high in the development of management plans for streams, lakes, and wetlands in Washington State. One of the many challenges facing salmon and trout populations is an inability to utilize their historic rearing and spawning grounds due to fish passage barriers that block access to habitat. To address this, the Washington State Department of Fish and Wildlife (WDFW) and the Washington State Department of Transportation (WSDOT) have developed a comprehensive program to eliminate fish passage barriers along state highways.

The amount of habitat that was once blocked by fish passage barriers was derived from habitat surveys or by using Geographic Information System (GIS) software for sites that were lacking habitat surveys.

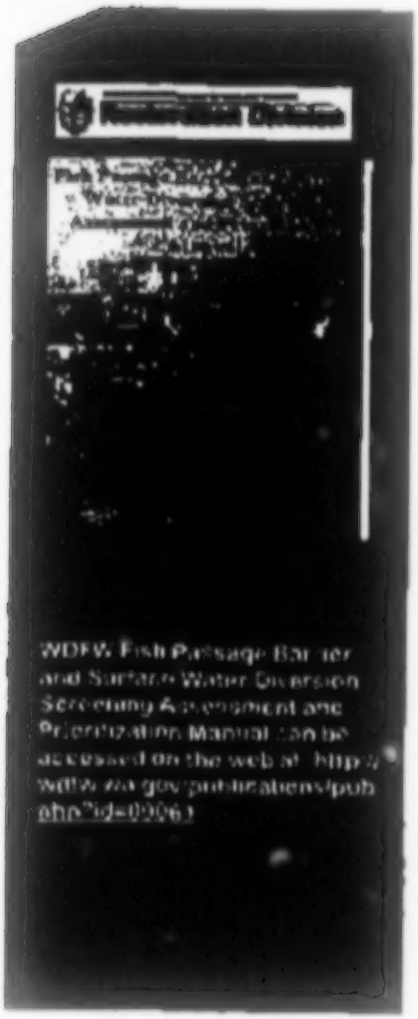
Prior to 1991, WSDOT addressed the correction of fish passage barriers during highway construction and maintenance projects as required by permit. In 1991, in cooperation with the Washington State Legislative Transportation Committee, WSDOT committed funding from its Highway Construction Program to inventory fish passage barriers to anadromous fish species at state highway crossings. WSDOT contracted with the WDFW to conduct the inventory and habitat studies necessary to prioritize barriers for correction. In conjunction with securing funding for fish passage inventory, WSDOT began obtaining funding to correct barriers through stand-alone projects.

This report summarizes WSDOT's fish passage barrier inventory efforts, correction plan, corrections conducted with dedicated fish passage barrier correction funds (I-4 funds) since 1991 and those performed during road projects. In addition, this report includes WSDOT fish passage projects completed in 2011, long-term scoping and planning for future barrier corrections and results of fish use monitoring of completed and planned fish passage barrier projects. The CD attached to the back cover of this report contains four appendices in Microsoft Excel format: fish passage barriers, fishways that need maintenance for fish passage, fish passage projects that are in the process of biological and engineering scoping, and the results of spawner surveys conducted upstream and downstream of fish passage projects completed in 2011.

FISH PASSAGE BARRIER INVENTORY

Inventory Development Over Time

The fish passage barrier inventory has changed in scope several times since its inception. Prior to 1994, the WSDOT culvert inventory was salmon-centric. Fish passage barrier and habitat assessments were conducted on streams with a gradient of up to seven percent, which marked the presumed upper limit of salmon habitat. Subsequent to 1994, fish passage barrier inventories were expanded to include higher gradient steelhead trout habitat. Following this change, all culvert evaluations and habitat surveys were done on streams with up to 12 percent gradient. In February 1998, WDFW increased the gradient criteria from 12 to 20 percent in order to include resident fish and to adhere to the current Forest Practices Rules. In 1998, WSDOT contracted with the WDFW to commence a more extensive inventory of barrier crossings using the current fish passage criteria (WDFW Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual 1998, revised 2009). Under the new criteria, all fish bearing stream crossings were to be assessed.



In October 2007, the expanded inventory following the newest fish passage criteria was completed on the entire state route system of 11,355.82 kilometers (7,056.18 miles). The summary results of the inventory are shown in Table 1. Each year, the inventory numbers are updated, as a result of on-going reassessment efforts on selected fish passage structures.

Reassessment Efforts

WSDOT and WDFW recognized the need to periodically update the fish passage inventory to ensure that culverts that were previously determined to be passable have not become barriers. With the inventory completed in 2007, WDFW began reassessing passable culverts without significantly reducing the current effort to complete the habitat assessments necessary for prioritizing barriers for correction. WDFW generated a list of 358 culverts thought to have the highest likelihood of becoming barriers. The choice was based on the ratio of culvert width to average channel width measurements. Culverts that were chosen for the analysis either had no culvert width to streambed width ratio measurements, or had a ratio of less than 1. The reassessment of the culverts takes place when a crew is in the vicinity conducting habitat assessments.

Fish Passage Inventory Updates as of June 2012

WDFW inspected 6,527 crossings in natural drainages during the course of the inventory. The inspected crossings included culverts as well as other features associated with WSDOT highways and rights-of-way, such as road fills, streambed controls, and dams.

- Of the 6,527 crossings over natural drainages, 3,204 were identified as crossings in fish bearing streams.
- Approximately 62% (1,988) of the examined fish bearing crossings were identified as barriers (Table 1). Out of the 1,988* barriers, 941 are total barriers to fish passage and 1,047 provide partial fish passage.
- Sixty crossings require further analysis to determine fish passage barrier status.

*The number of fish passage barriers is a dynamic value that changes as the on-going inventory takes place. Adverse conditions at the time of the initial inventory may delay the assessment of all features in a given area. As previously missed culverts are inventoried, the number of crossings (and possibly fish passage barriers) may increase.

Table 1. Fish Passage Barriers - *June 2012*

Based on the WSDOT Expanded Fish Passage Inventory as of June 2012

Fish Stream Crossings	Fish Passage Barriers		Unknown Barrier Status		Barriers with Limited Habitat Gain[1]	Barriers with Habitat Threshold Gain Not Verified	Barriers Fixed[2]
	Total Barriers (0% Passable)	Partial Barriers (33% or 67% Passable)					
3,204	941	1,047	60		417	52	258

[1] Barriers that do not meet current WDFW threshold habitat gain criteria to justify correction using dedicated funding until higher priority barriers are corrected.
[2] Two hundred and fifty-eight WSDOT fish passage barriers have been reported as replaced or retrofitted for fish passage, however, 61 of these require additional work to meet current fish passage criteria (See Tables 5 and 7).

- Barriers with a significant habitat gain** (1,519) will be prioritized for correction with dedicated funding.
- Fifty-two fish passage barrier crossings are scheduled for verification of significant habitat gain.

**A significant reach of habitat is defined as a section of stream having at least 200 linear meters of habitat without a natural barrier.

Regional Statistics

WSDOT has six geographic management regions: Northwest, North Central, Olympic, Southwest, South Central, and Eastern (See Figure 1). A summary of all the fish passage barriers within the six regions are shown in Table 2. For a complete list of fish passage barriers refer to Appendix I on the CD.

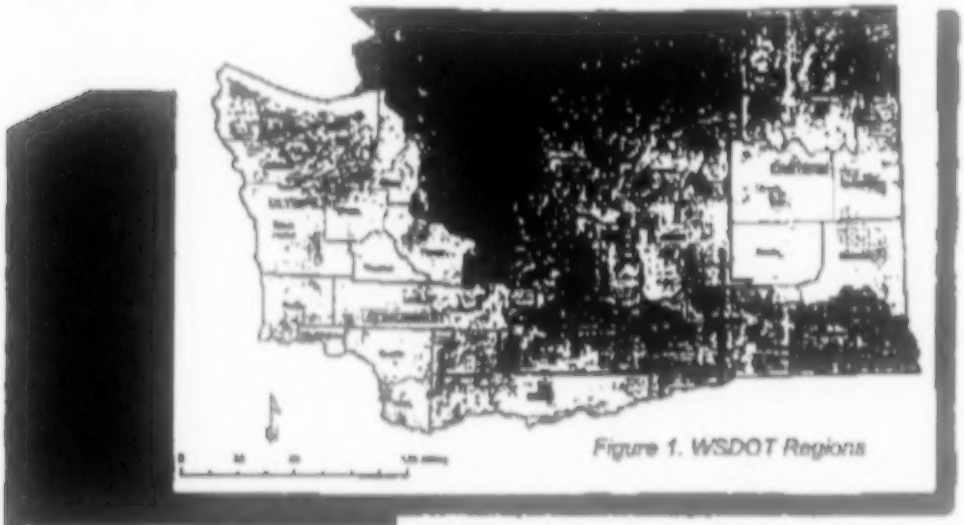


Figure 1. WSDOT Regions

Table 2. Fish Passage Barrier Assessment Summarized Across Six WSDOT Management Regions - *June 2012*

WSDOT Region	Fish-bearing Crossings	Fish Passage Barriers		Barriers with Limited Habitat Gain[1]	Barriers with Habitat Threshold Gain Not Determined	Crossings Repaired[2]
Northwest	955	610		153	10	120
North Central	199	134		32	6	15
Olympic	927	626		130	13	74
Southwest	678	370		79	16	28
South Central	144	66		5	5	7
Eastern	301	182		18	2	14
Total	3,204	1,988		417	52	258

[1] Barriers that do not meet WDFW current 200m threshold habitat gain criteria to justify correction using dedicated funding until higher priority barriers are corrected.

[2] Two hundred and fifty-eight WSDOT fish passage barriers have been replaced or retrofitted, however, 61 of those require additional work to meet current fish passage criteria (See Tables 5 and 7).

Fishways

In addition to culverts, WSDOT owns 160 fishways statewide. Regular inspections and maintenance are essential in the continued successful operation of fishways. Some of the fishways require frequent maintenance for fish passage but are not fish passage barriers. WDFW biologists perform inspections for each regularly inspected fishway in the spring, document maintenance needs and fish passage deficiencies and notify WSDOT. A follow-up inspection, conducted in the fall ensures that all the fish passage deficiencies were corrected and maintenance needs were met. Maintenance of the fishways includes removal of organic debris and sediments, repairing broken or missing baffles and other similar activities ensuring fish passage through fishways. For most fishways, maintenance alone can not provide unimpeded fish passage indefinitely. Eventually, baffles, log and concrete controls deteriorate, or the structures associated with fishways need to be replaced. When the fishways were originally designed, it was recognized that they were intended to provide relatively short-term, inexpensive interim fish passage solution. In many situations where culvert replacement with a larger culvert or a bridge would have been very difficult or prohibitively expensive, fishways provided uninterrupted fish passage for many years. When the fishways reach the end of their lifespan and can no longer provide fish passage, they are put on the barrier list to be evaluated by biologists and engineers for a repair solution. Like the other fish passage barriers, barrier fishways are included in the scoping and prioritization process that will ultimately lead to their repair or replacement.

A complete list of all the WSDOT-owned barrier fishways and culverts or fishways that need maintenance for fish passage can be found on Appendix 1

Figure 2. An example of a failed fishway at Deep Creek on SR 18 that has been placed on the barrier list and is no longer inspected. The fishway consists of badly deteriorated concrete baffles and a sealcrete control downstream that no longer backwaters the culvert, hindering fish passage for coho salmon, and steelhead, and resident and searun cutthroat trout.

Figure 3. An example of an efficient fishway at a tributary to Nisqually River on SR 706 that provides passage for resident cutthroat trout. The fishway, built in 2005, consists of a round steel culvert equipped with six log controls downstream. This fishway is inspected annually to ensure continuous and unimpeded fish passage.

FISH PASSAGE PROJECT DEVELOPMENT

Project Prioritization

All the fish passage barriers that were identified during the inventory are prioritized for repair. The prioritization process aims to select the projects with the greatest production benefits for anadromous and resident fish species. Only barriers with significant amount of potential habitat gain are prioritized for correction as stand-alone fish passage restoration projects in the Environmental Retrofit Program (I-4) budget. Project priority is determined by many factors that are consolidated into a numeric Priority Index (PI) model. The PI values are contained within the WDFW Fish Passage and Diversion Screening Inventory (FPDSI) Database and provide a standardized, objective, relative priority ranking for each project. Among the factors determining a project's priority are:

- Amount and quality of habitat gained.
- Degree of passability improvement.
- Species-specific production potential of the gained potential habitat.
- Mobility of the species present.
- Stock status of species present or potentially present (WDFW Salmonid Stock Inventory, SaSI).
- Cost of the project.

*A significant reach of habitat is defined as a section of stream having at least 200 linear meters of habitat without a natural barrier.

The habitat assessment is conducted per the WDFW Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual, December 2009 (located on the Internet at: http://hdfw.wa.gov/publications/pub.php?id=00061).

A complete list of all the fish passage barriers with a completed habitat assessment is included in Appendix 4.

Habitat Assessment

Three methods of habitat assessment are used: Full Physical Survey (FS), Reduced Sampling Full Physical Survey (RSFS), and Threshold Determination (TD). The Full Physical Survey qualifies and quantifies habitat based on the measurements taken during the survey of the entire stream, while the TD verifies the existence of a significant reach* of habitat without a gradient or a natural barrier either downstream or upstream of a fish passage barrier crossing.

To expedite the prioritization process, all habitat assessments since 2005 have been performed using a RSFS, which differs from the FS by the number of samples collected per stream reach. Only one sample per reach is taken during a RSFS regardless of the reach length, provided that the habitat characteristics remain unchanged throughout the reach.

WDFW prioritizes habitat assessments according to the highest potential habitat gain. Between June 2011 and June 2012, 40 physical surveys on selected streams were completed, during which 62.9 kilometers (39 miles) of habitat downstream and 54.3 kilometers (33.8 miles) of habitat upstream were surveyed. Based on the current (as of June 2012) state-wide barrier count and assuming one field crew, it is estimated that the assessment of blocked potential habitat will be completed in the 2027-2029 biennium.

Fish Passage Project Scoping Process

Following prioritization, each of the fish passage barriers with a PI above the current threshold, undergoes a multi-phased pre-scoping process. The first step in this process is biological scoping by a WDFW biologist, which involves verification of the inventory and habitat assessment data. A crucial element of the biological scoping is verifying that the habitat conditions and species expected to benefit are correctly reflected in the PI value for each barrier. In addition to the PI, the biologist considers other factors for project selection, such as the number and location of additional barriers in the watershed, project feasibility, likelihood for success, other restoration efforts in the watershed, and project costs. All the information gathered during the biological scoping process is summarized in a biological scoping report accompanied by a map that illustrates the location of additional human-made barriers downstream and upstream of the WSDOT barrier. If the PI value drops below the current scoping threshold as a result of changes made by the biologist during a scoping process, the project is deferred until higher priority projects are completed. Projects that require correction of other fish passage barriers or that require correction of habitat deficiencies in the watershed prior to development of a correction strategy may be postponed until those issues are resolved.

Once biological scoping is complete, projects that successfully meet the verification process have a WDFW scoping engineer assigned to develop conceptual designs for barrier correction. The development of conceptual design has several stages. The first stage consists of a site survey, where field data is collected for the crossing structure. During the second stage, the field data is incorporated into AutoCAD where the project site is defined by preparation of 3D surfaces, contours, and annotations. The final product of the second stage is a finished set of plans consisting of the necessary calculations to prepare the design. The plans are then reviewed and edited by the project engineer. The project engineer summarizes all the calculation, observations and plans into a Draft Engineering Scoping Report and submits it to a peer review team consisting of a peer review engineer and the scoping biologist. All the comments and suggestions made by the peer review team are incorporated into the Final Engineering Scoping Report. The report describes the existing conditions and proposes several design options. When the WDFW scoping engineer has identified all reasonable conceptual design options, a pre-scoping meeting is held. WDFW participants in this meeting are, at a minimum, the scoping biologist, scoping engineer and area habitat biologist (AHB). WSDOT participants include the regional scoping engineer and representatives of the Environmental Services Office, Regional Program Management, Regional Environmental Office, and Regional Project Development Office. The outcome of this meeting is a consensus decision, on which conceptual design option will be pursued. A stakeholder concurrence form is generated that documents the outcome of the meeting and includes the cost estimate for the selected design option. Once each participant present at the meeting reviews and concurs with the information on the concurrence form, pre-project scoping is complete and the project is eligible to be placed on the Ten Year Plan (Table 3). Figure 4 outlines the complete scoping, project design, and barrier removal process through the I-4 program.

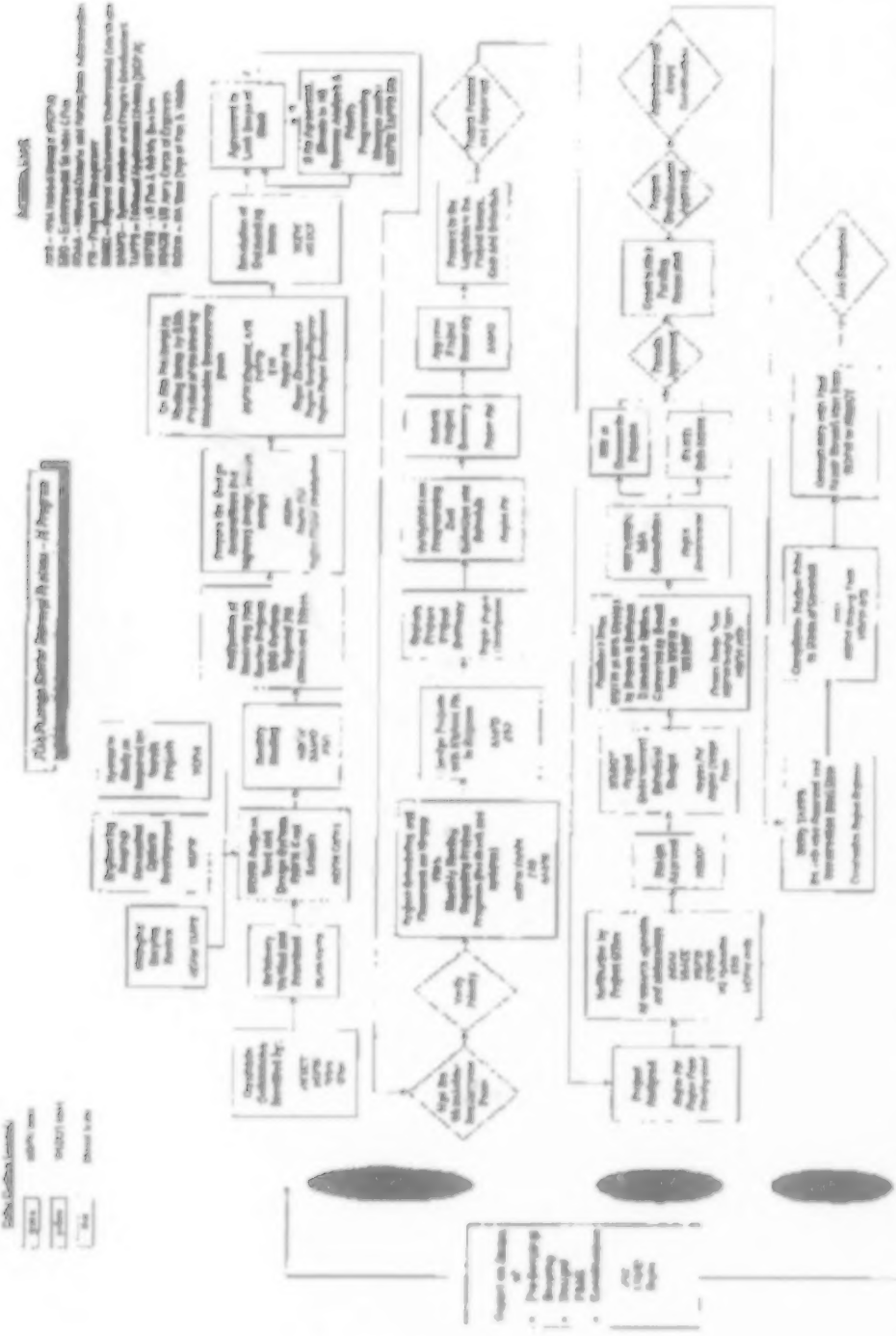


Figure 4. A Complete Fish Passage Barrier Scoping and Removal Process with I-4 Program

FISH PASSAGE BARRIER CORRECTION PLAN

Fish passage problems in Washington are shared among federal, state, tribal, county, city, and private barrier owners. The 1,988 WSDOT-owned fish barriers identified during the WSDOT Fish Passage Inventory are estimated to block more than 6,192* linear kilometers (3,848 miles) of potential salmonid habitat. Only a small fraction of WSDOT barriers, however, are the only fish passage barriers in a given watershed. On average, there are two other (non-WSDOT) barriers downstream and five upstream of a WSDOT barrier**. Other, non-WSDOT barriers within the blocked potential habitat also need to be corrected to fully realize the potential habitat gain.

WSDOT Fish Passage Barrier Correction Strategy

WSDOT manages fish passage barrier correction in three ways:

- First, each biennium, the Legislature appropriates funds for stand-alone correction projects to address some of the highest priority barriers. These "dedicated correction" projects are part of the WSDOT Environmental Retrofit Program. The highest priority barriers selected through a multi-phased process of prioritization, scoping, and project design are listed in the Ten Year Plan.

- Second, when WSDOT plans a highway safety or mobility project, it reviews the project area for barrier correction opportunities. Barrier culverts that require a Hydraulic Project Approval (HPA) are corrected as part of the highway construction project. If no HPA is required, WSDOT determines whether barriers within the project boundary can be corrected more efficiently as part of the highway project.

- And third, some fish passage barriers are corrected during routine maintenance on failing culverts, Chronic Environmental Deficiency (CED) projects, and Major Drainage projects. Generally, however, corrections completed through maintenance are small-scale repair projects and do not typically include a full culvert replacement.

WSDOT Transportation Improvement Projects (Barriers Fixed as Part of Highway Safety and Mobility Projects)

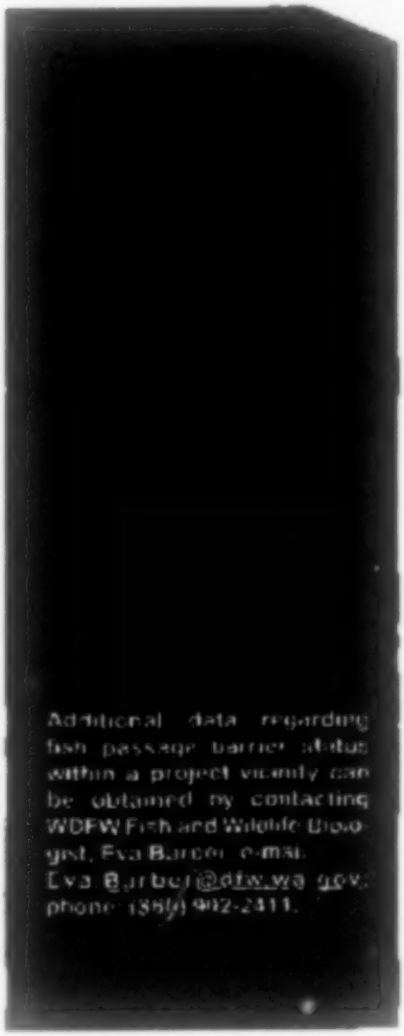
The second way that WSDOT corrects fish passage barriers is the integration of fish passage repairs with road project construction. It is a cost-effective way to accelerate barrier correction and reduce mobilization costs. WDFW and WSDOT integrate fish passage barrier correction into planned WSDOT transportation improvement projects whenever possible. All fish passage barriers within the upcoming transportation project area should be considered for correction, including barriers with limited habitat gain that are not considered for correction with dedicated funding.

WDFW reviews the records of all fish passage barriers within the boundaries of proposed transportation projects to ensure that all fish passage crossings within a given project area have been identified. WDFW works closely with WSDOT to identify all fish passage barriers within a project boundaries and schedules an additional field review if needed.

Fish Passage Barrier Correction Tied to Road and Culvert Maintenance

Culverts that require frequent and chronic maintenance for fish passage or highway safety may be fixed as a part of the Chronic Environmental Deficiency (CED) or Major Drainage programs. The CED Program was established by WSDOT in 2001 to mitigate for the impacts of repetitive maintenance on the aquatic environment. Potential CED projects can be nominated by WSDOT, WDFW, Tribes, or other entities. For more information on CED Program and projects visit the WSDOT web site at the following location: http://www.wsdot.wa.gov/Environment/Biology/FP/.

The Major Drainage Rehabilitation Program addresses major drainage features that need repair or replacement to reduce the risk of roadway closures and other impacts to motorists. This preventative maintenance enhances the function of existing drainage structures protecting the highway and improves fish passage in fish bearing drainages.



Additional data regarding fish passage barrier status within a project vicinity can be obtained by contacting WDFW Fish and Wildlife Biologist, Eva Barber e-mail: Eva.Barber@dfw.wa.gov; phone: (360) 902-2411.

TEN YEAR PLAN SUMMARY

Ten Year Planning Document

In coordination with WSDOT, each year, WDFW prepares a prioritized list of fish passage projects to be evaluated and constructed over the next five biennia as part of the WSDOT Environmental Retrofit Program. This list serves as a resource for project planning and coordination with the recognition that the actual level of project design and construction is dependent on funding. The Ten Year Plan is the result of a multi-phased process of project prioritization, scoping, development of conceptual designs, and budgeting that is carried out by WDFW biologists, environmental engineers and WSDOT headquarters and regional staff. The Ten Year Plan is regularly updated as new projects are identified, prioritized, scoped, and refined. The 2012 Ten Year Plan is outlined in Table 3.

Table 2. 2012 Ten Year Plan

Site ID	Road	Mile Post	Stream	WRIA	RT	Funding Status	Project Status	Biennium
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 530	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 202	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 532	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 542	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	I-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 202	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SR 900	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Site ID	Road	Mile Post	Stream	WRIA	RT	Funding Status	Project Status	Biennium
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table 3. 2012 Ten Year Plan cont.

WSDOT Olympic Region								
Site ID	Road	Mile Post	Stream	WQLS	PI	Funding Status	Project Status	Structure
991246	SR 106	13.5	Twanoh Falls Cr	14.0132		Funded	Design & Const	2008-11, 2011-13, 2013-15
991730	SR 112	25.6	Pysht R trib	19	20.31	Funded	Design & Const	2008-11, 2011-13
990304	SR 112	47.1	Nelson Cr	19.0032	20.42	Funded	Design & Const	2008-11, 2011-13
990017	SR 16	28.1	Anderson Cr	15.0211	36.6	Funded	Design & Const	2011-13, 2013-15
990753	SR 16	28.1	Anderson Cr	15.0211	32.53	Funded	Design & Const	2011-13, 2013-15
990062	SR 112	37.61	Coville Cr	19.0001	32.03	Funded	Design & Const	2011-13, 2013-15
990297	SR 7	41.17	Muck Cr	11.0018	24.61	Funded	Design & Const	2011-13, 2013-15
991049	SR 507	36.35	Lacamas Cr	11.0022	37.62	Funded	Design & Const	2011-13, 2013-15
15.0229 0.10	SR 3	40.96	Chico Cr	15.0229	48	Funded	Design & Const	2011-13, 2013-15
990123	SR 307	0.40	Dogfish Cr	15.0285	27.97	Funded	Design & Const	2011-13, 2013-15
990133	SR 8	6.3	EF Wildcat Cr	22.0503A	52.71	Funded	Design & Const	2013-15, 2015-17
105.00821121a	SR 162	11.04	Cord Cr	10	23.5	Not Funded	Future	2015-17
991572	SR 307	1.49	Dogfish Cr trib	15.0286	22.28	Not Funded	Future	2015-17
991989	SR 507	1.34	Dogfish Cr trib	15.0286	19.84	Not Funded	Future	2015-17
994325	SR 305	2.44	Mission Cove trib	15.0321	29.44	Not Funded	Future	2015-17
990158	SR 109	28.1	Elk Cr	21.0761	16.5	Not Funded	Future	2015-17
990178	US 101	140.85	Hatton Cr	21.0134	25.08	Not Funded	Future	2015-17
990773	SR 8	8.1	Mox Chehalis Cr trib	22	20.65	Not Funded	Future	2017-19
992510	US 101	71.02	Joe Cr	24.0129	14.98	Not Funded	Future	2017-19
990075	US 101	271.86	Chicken Coop Cr	17.0278	30.9	Not Funded	Future	2017-19
991558	SR 306	7.28	Kirkeal Cr	15.0286	29.48	Not Funded	Future	2017-19
994484	US 101	303.01	Murphy Cr	17.0001	30.05	Not Funded	Future	2017-19
990214	SR 112	35.21	Joe Cr	19.0109	18.37	Not Funded	Future	2017-19
994791	US 12	9.04	Wynoochee R trib	22	18.53	Not Funded	Future	2017-19
991730	SR 112	7.35	Olson Cr	19.0227	18.2	Not Funded	Future	2017-19
993679	US 101	80.72	Hoquiam R trib	22	17.35	Not Funded	Future	2019-21
991732	SR 112	29.12	Indian Cr	19.0112	15.88	Not Funded	Future	2019-21
991061	SR 112	53.5	Falls Cr	19.0912	14.7	Not Funded	Future	2019-21
990144	SR 112	48.49	Field Cr	1	14.61	Not Funded	Future	2019-21
991272	SR 109	33.1	Wayne Cr	21.0728	14.45	Not Funded	Future	2019-21
990731	US 101	111.34	Stevens Cr trib	22.0044A	14.44	Not Funded	Future	2021-23
990082	SR 121	4.04	Blooms Ditch	11.0022	13.8	Not Funded	Future	2021-23
990554	US 101	208.37	Wilson Cr	20.0336	13.7	Not Funded	Future	2021-23

Table 3. 2012 Ten Year Plan cont.

Site ID	Road	Mile Post	Stream	WDFW	PI	Funding Status	Project Status	Direction
WSDOT Olympic Region								
991258	SR 112	29.71	Butler Cr trib	19	23.48	Not Funded	Future	2021-23
990341	SR 112	29.7	Butler Cr	19	31.84	Not Funded	Future	2021-23
991006	US 101	315.10	Scrimmer Cr	16.0386	13.4	Not Funded	Future	2021-23
990981	SR 3	38.49	Serene Cr	15.0364	13.37	Not Funded	Future	2021-23
WSDOT Southwest Region								
990352	US 97	21.35	Highland Canyon/Indian Cr	30.0140	7.46	Funded	Design & Const	2009-11, 2011-13
990818	SR 4	34.08	Trib to Elochoman St	25.0000	25.18	Funded	Design & Const	2011-13, 2013-15
911690	SR 4	33.98	Trib to Elochoman St	25.0000		Funded	Design & Const	2011-13, 2013-15
992282	US 12	124.97	Bunton Cr	26.1106	20.26	Not Funded	Future	2013-15
990198	US 12	95.75	Highland Cr	26.0380	18.12	Not Funded	Future	2013-15
990885	SR 8	5.27	Willapa R trib	24.0334	21.78	Not Funded	Future	2015-17
990353	US 101	91.16	Barto Cr	26.0000	20.06	Not Funded	Future	2015-17
991658	SR 503	13.84	Rock Cr	27.0222	27.45	Not Funded	Future	2017-19
990152	I 5	38.08	Foster Cr	28.0475	20.95	Not Funded	Future	2017-19
990341	SR 14	140.80	Pine Cr	31.0534	24.29	Not Funded	Future	2019-21
991667	SR 503	13.21	Rock Cr trib	27.0223	15.08	Not Funded	Future	2019-21
WSDOT Southwest Region								
990373	SR 503	25.38	Chelatchie Cr	27.0373	16.8	Not Funded	Future	2021-23
991599	US 101	2.58	Columbia R trib	24.0041	17.09	Not Funded	Future	2021-23
991558	US 101	2.00	Station Camp Cr	44.0042	43.33	Not Funded	Future	2021-23
WSDOT South Central Region								
995078	SR 129	5.76	Rattlesnake Cr	35.2314	12.44	Not Funded	Future	2015-17
990378	I 90	70.0	Silver Cr	30.1719	15.29	Not Funded	Future	2017-19
WSDOT Eastern Region								
990106	US 395	247.77	Deadman Cr	10.0008	31.48	Not Funded	Future	2019-21

Plan Notes-

1) This plan is intended to show interested parties where WSDOT is targeting its resources for high priority current and future fish passage projects.

2) The potential projects shown in the plan have all been pre-scoped with WDFW for a potential solution.

3) Only projects in the 2011-13 biennium have funding from the Washington State Legislature. The timing of the remaining projects is subject to obtaining funds from the Washington State Legislature.

4) This plan includes projects funded by other funding sources within WSDOT. These include US 97 Highland Canyon and SR 106 Twanoh Falls creeks.

COMPLETED FISH PASSAGE PROJECTS

WSDOT Fish Passage Barriers Corrected with I-4 (Stand-Alone) Dedicated Funding

Eighty-six fish passage projects at high priority sites have gone through the complete scoping, design, and construction process since 1991. All of these projects have been completed using dedicated funding for stand-alone barrier corrections. Five fish passage barriers were corrected in 2011with dedicated funding:

- An undersized, barrier culvert on SR 548 (Figures 5 and 6) was replaced with a stream simulation culvert. This is the second WSDOT fish passage project on Terrell Creek in the past five years. The first fish passage project, located on SR 548 at milepost 0.35 was completed during a major drainage project in 2007. The current project is located further upstream, at milepost 4.67. The two projects collectively opened up access to over 18 kilometers (11.2 miles) of potential fish habitat.
- An old dam located below a bridge on US 2 was removed and a channel reconstructed where the dam used to be. Coho salmon were observed spawning in the new channel within a few months of project's completion (Figures 7 and 8).

Table 4. Fish Passage Projects Completed in 2011 with Dedicated I-4 Funding

Site Id	WSDOT Region	Road	MP	Stream	WRIA	PI	Potential Lineal Gain (km)
980429	NW	SR 548	4.67	Terrell Cr Culvert Replacement	01.0059	25.44	11.3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
980332	OLY	US 101	102.14	Tributary to S Branch Big Cr Culvert Replacement	22.0059	25.82	7.9
[illegible]	OLY	US 101	[illegible]	[illegible]	22.0059	[illegible]	1.2
982493	OLY	US 101	68.59	Tributary to Lower Salmon Cr Culvert Replacement	24.0108	14.45	4.4

For a complete list of projects completed with the dedicated funding through the Environmental Retrofit Program see Table 5

- Three fish passage projects on US 101 collectively opened up 13.6 kilometers (8.5 miles) of potential fish habitat for many fish species (Figures 9 through 14).

Terrell Creek, tributary to Birch Bay

Fish Passage Barrier Corrected with Dedicated Funding

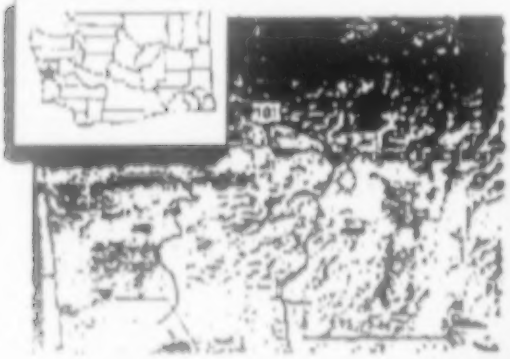
Figure 5. The old culvert was a round concrete pipe, 1.83 meters (6-foot) diameter. The culvert was assessed as a fish passage barrier due to a 0.60 meters (1.64-foot) water surface drop and a 2.5% slope.

Figure 6. In the summer of 2011, WSDOT replaced the barrier culvert with a 7.62 meters (25-foot) concrete box culvert with natural streambed material. This fish passage project restored access to 11.3 kilometers (7 miles) of potential habitat for coho salmon, and steelhead and searun and resident cutthroat trout.

Figures 7 and 8. The rock, concrete, and wood remnants of an old abandoned dam (left) that was historically used as an outlet control structure for a millpond posed a fish passage hindrance to salmonids. In 2011, fish passage through this reach of the stream was restored by removal of the remnants of the dam structure. A new channel was constructed (right) to alleviate a slight constriction in the stream with reshaped and re-vegetated banks. As a result of this fish passage project, access to 15.1 kilometers (9.4 miles) of potential habitat was restored to coho, pink and chum salmon, and steelhead, searun, and resident cutthroat trout.

An unnamed tributary to South Branch Big Creek

Fish Passage Barrier Corrected with Dedicated Funding



Before Construction

Figure 9. The old culvert was a squash corrugated steel pipe, 1.77 meters (5.8-foot) wide. The culvert was assessed as a velocity barrier.

After Construction

Figure 10. The newly constructed culvert is a precast concrete box structure, 6.46 meters (21-foot) wide with natural streambed material placed inside the culvert to simulate natural stream conditions. This fish passage project restored access to 7.9 kilometers (4.9 miles) of potential habitat for chum, Chinook, and coho salmon, and steelhead, searun and resident cutthroat trout.

An Unnamed tributary to South Branch Big Creek

Fish Passage Barrier Corrected with Dedicated Funding

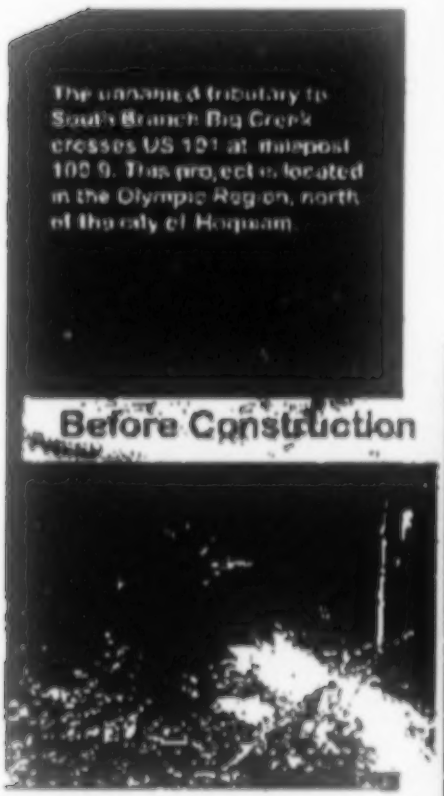


Figure 11. The old culvert was a round concrete pipe, 0.60 meters (2-foot) wide. The culvert was assessed as a barrier due to a 3% slope.

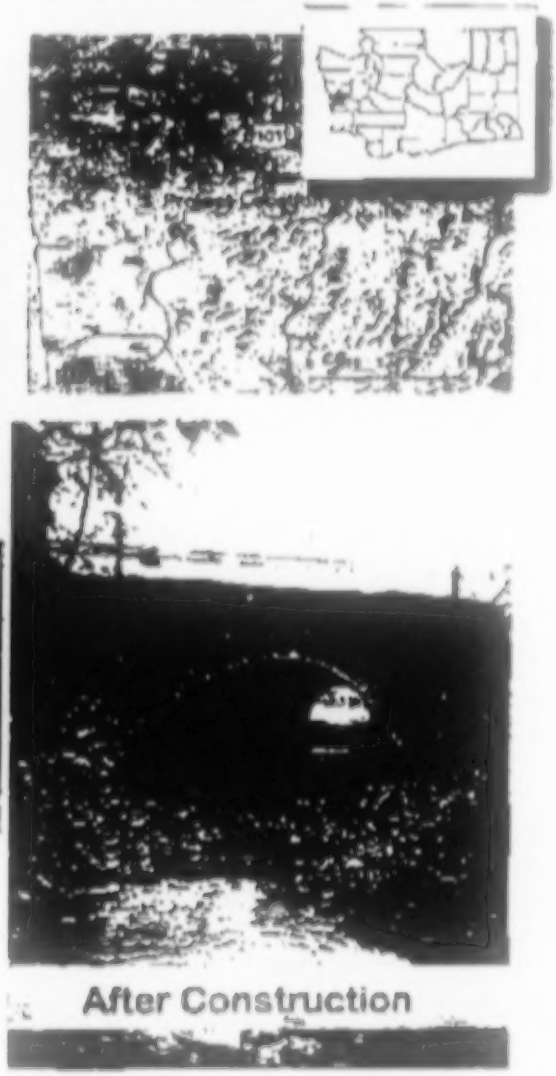


Figure 12. The new crossing is a round corrugated aluminum pipe, 3.05 meters (10-foot) wide with a streambed material placed inside the culvert to simulate natural stream conditions. This fish passage project restored 1.2 kilometers (0.75 miles) of perennial habitat for chum, Chinook, and coho salmon, and steelhead, searun and resident cutthroat trout.

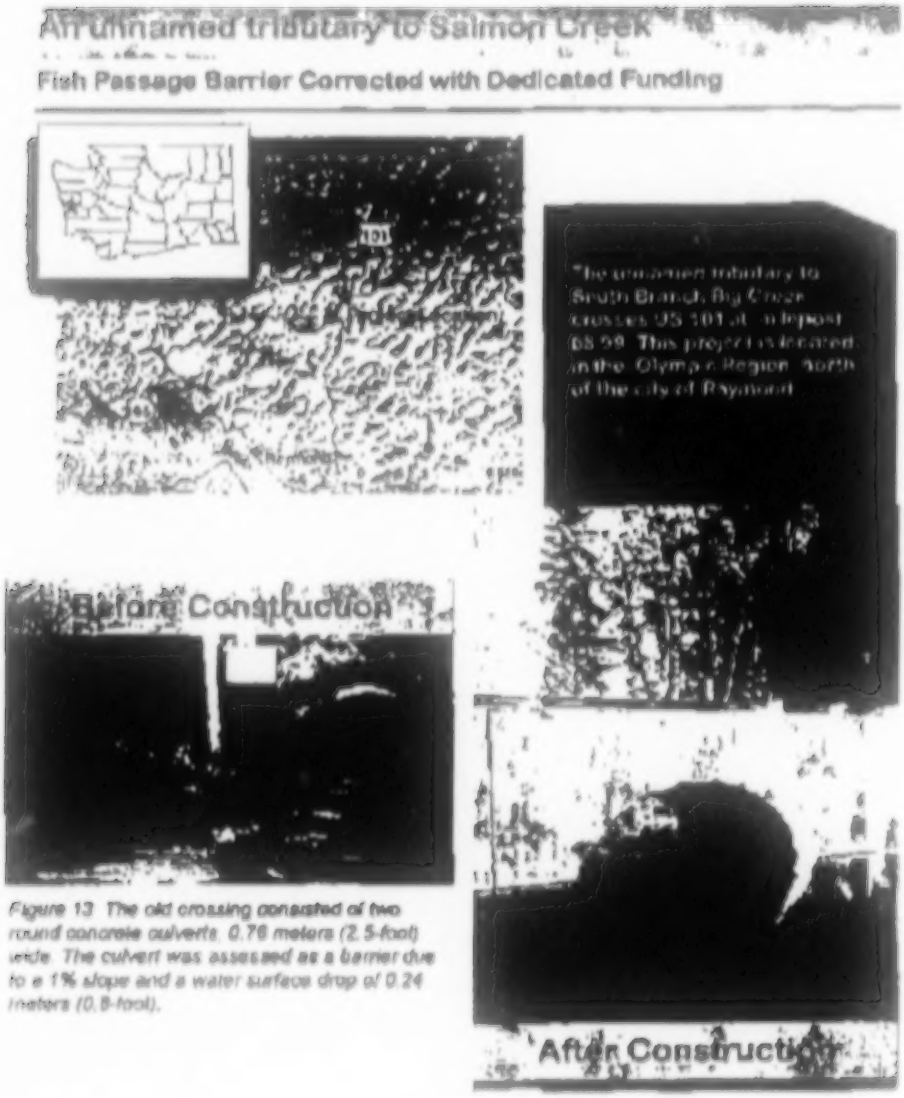


Figure 13. The old crossing consisted of two round concrete culverts, 0.76 meters (2.5-foot) wide. The culvert was assessed as a barrier due to a 1% slope and a water surface drop of 0.24 meters (0.8-foot).

Figure 14. The new crossing is a corrugated aluminum arch structure, 5.5 meters (18-foot) wide with natural streambed material placed throughout the culvert. This fish passage project restored access to 4.6 kilometers (2.9 miles) of potential habitat for coho salmon, and steelhead, searun and resident cutthroat trout.

Table 5. Fish Passage Projects Completed with Dedicated 1-4 Funds

Region 1 - NORTHWEST

Site Id	Road	MP	Stream	WRIA	Year	PI	Potential Linear Gain (km)	Project Cost $
990142*	SR 202	11.96	Evans Cr Fishway	08.0106	1992		4.5	319,044
03.0183 6.50*	I-5	219.4	Fisher Cr Fishway	03.0183	1992	35.07	27.7	19,999
01.0626 0.35	SR 11	18.6	Chuckanut Cr Fishway	01.0626	1993	39.28	2.7	65,788
991712	US 2	18	Unnamed tributary to Skykomish R Culvert Replacement	07.0864	1993	19.22	1.7	60,000
990014	SR 542	3.5	Squalicum Cr Fishway	01.0552	1994	38.09	4.7	68,000
105R042117a*	SR 164	8.5	Pussywillow Cr Culvert Replacement	10.0048	1996	29.74	15	117,566
05.0021 4.10	I-5	216.7	WF Church Cr Fishway	05.0021	1998	34.61	1.6	17,101
990433*	SR 900	19.5	Tibbets Cr Fishway	08.0169	1999	25.16	0.7	147,000
991168*	SR 530	25.94	Schoolyard Cr Fishway	05.0185	1999	24.32	1.3	360,289
990622	I-5	211.5	Unnamed tributary to Pilchuck Cr Fishway	05.0065	2000	42.03	8.2	45,107
991210*	SR 99	6.86	WF Hylebos Cr Fishway	10.0014	2002	37.46	3.4	105,965
991741	SR 534	1.2	Unnamed tributary to Bulson Cr Fishway	03.0199	2002	28.02	7.9	790,555
05.0268 0.80	I-405	10.12	Coal Cr	08.0268	2002	34.58	8.2	155,710
990291	SR 530	44	Moose Cr Culvert Replacement	05.0257	2002	23.88	6.7	140,000
990317	SR 530	44.27	Flat Cr Culvert Replacement	05.0257A	2002	23.98	6.7	140,000
994411	I-90	15.48	Tibbets Cr Bridge	08.0169	2004	25.93	9.4	5,536,555
991821	SR 92	0.47	Stevens Cr Culvert Replacement	07.0147	2005	22	2.1	634,398
991123*	SR 9	48	Cribble Cr Retrofit	03.0227	2005	33.92	4.3	322,176
993090	I-5	182.7	Swamp Cr Fishway	08.0059	2007	58.42	10.8	433,648
08.0059 7.00	I-405	29.75	Swamp Cr Fishway	08.0059	2007	61.62	0.6	436,324
07.0148 1.30	SR 92	1.93	Catherine Cr Fishway	07.0148	2007	24.76	7.3	377,569
990023	SR 542	28.74	Baptist Camp Cr Culvert Replacement	01.0433	2009	8.36	0.5	495,105
991751	SR 531	3.8	Cougar Cr Culvert Replacement	05.0041	2009	10.97	0.8	1,223,075
990606	SR 542	36.98	Chain-up Cr Bridge	01	2010	14.63	0.5	1,225,471
990429	SR 548	4.67	Terrell Cr Culvert Replacement	01.0889	2011	36.64	11.3	1,707,816
07.0939 0.40	US 2	68.99	Wagley's Creek dam removal	07.0999	2011	50.82	15.1	771,000
				Region 1 Total Estimated Linear Habitat Gain (km):			163.09	
				Region 1 Total Estimated Expenditure:				15,718,433

*Fish passage project, which is currently a partial or a total barrier to fish passage. For more information refer to Appendix IA.

Table 5. (cont.)

Region II - North Central

Site Id	Road	MP	Stream	WRIA	Year	PI	Potential Lineal Gain (km)	Cost $
990149	SR 971	8.9	First Cr Bridge	47.0096	1999		0.01	287,000
990145	SR 971	9.1	First Cr Bridge	47.0096	1999		17	287,000
980108	SR 113	29.28	Beaver Cr Culvert Replacement	48.0307	2000	37.85	93.9	765,461
990382	US 2	87.67	Skinney Cr Culvert Replacement	45.0701	2001	14.01	0.5	480,000
990383	US 2	88.03	Skinney Cr Culvert Replacement	45.0701	2001	12.15	0.5	480,000
990381	US 2	87.1	Skinney Cr Culvert Replacement	45.0701	2002	13.5	3	480,000
990226	SR 20	161.3	Little Boulder Cr Culvert Replacement	48.1400	2005	15.67	5	567,136
990282	US 2	70.21	Mill Cr Culvert Replacement	45.0956	2006	19.09	11.6	1,674,411
980124	SR 20	206.9	Fraser Cr Culvert Replacement	48.0309	2006	19.05	12.3	700,915
980114	SR 20	205.8	Beaver Cr Culvert Replacement	48.0307	2006	43.61	80.65	700,915
			Region II Total Estimated Linear Habitat Gain (km):				226.46	
			Region II Total Estimated Expenditure:					6,423,038

Region III - OLYMPIC

Site Id	Road	MP	Stream	WRIA	Year	PI	Potential Lineal Gain (km)	Cost $
990444*	US 101	246.4	Tumwater Cr Fishway	18.0256	1991	16.25	8.9	19,993
990323	SR 3	33.7	Parish Cr Fishway	15.0250	1992		1.6	14,855
990021*	US 101	253.9	Begley Cr Fishway	18.0185	1994	48.12	10.5	40,204
990219*	US 101	267.2	Johnson Cr Fishway	17.0301	1995	31.46	7.3	121,945
990348	SR 112	3.99	Rasmussen Cr Culvert Replacement	19.0230	1996	15.42	1.3	543,699
990197	US 101	171.7	Hurlbutt Cr Fishway	20.0437 D	1996	24.59	1.1	18,594
990174*	US 101	146.9	Harlow Cr Fishway	21.0134	1996	25.68	5.5	82,685
990169*	US 101	189.4	Grader Cr Fishway	20.0237	1996	24.48	4.5	189,964
991381	US 101	104.9	Unnamed tributary to Fairchild Fishway	22.0052	1997	19.46	5.5	195,126
990224	SR 3	57.1	Kitsman Cr Culvert Replacement and Baffles Installation	15.0368	1997	23.95	3.6	365,902
990143	US 101	105.6	Fairchild Cr Fishway	22.0051	1997	20.3	4.2	193,747

*Fish passage project, which is currently a partial or a total barrier to fish passage. For more information, refer to Appendix IA

Table 5. (cont.)

Sitold	Road	MP	Stream	WRIA	Year	PI	Potential Linear Gain (km)	Cost $
991501*	US 101	103.7	Unnamed tributary to Big Cr - new fishway built in 1997; fishway bent up in 2003	22.0057	1997	17.07	3.4	126,327
991502	US 101	103.1	Unnamed tributary to SB Big Cr Culvert Replacement	22.0059	1998	20.82	3.8	250,899
990400*	US 101	162.6	Steamboat Cr	20.0574	1998	27.53	7.6	23,800
991263	US 101	162.2	Big Cedar Cr Baffles Installation	20.0576	1998	19.73	2.4	121,328
991278	SR 108	5.89	McDonald Cr Fishway	14.0023	1998	25.21	1.4	260,615
991270*	SR 109	36.45	Unnamed tributary to Pacific Ocean Fishway	21.0215	1999	12.18	3.1	189,566
990466	US 101	246.9	Valley Cr Baffles and Roughened Channel	18.0249	2000	33.07	2	102,297
991797*	SR 3	25.31	Sweetwater Cr Culvert Replacement	15.0504	2001	16.96	1.1	261,000
161180	US 101	167.4	Fletcher Cr Fishway	20.0426	2003	20.61	2.2	19,085
18.0234 1.10*	US 101	250	Eagle Cr Fishway Upgrade	18.0234	2004	31.33	8.9	58,165
19.0110 0.50	SR 112	32.02	Jim Cr Culvert Replacement	19.0110	2004	28.5	14.1	570,000
17.0285 0.20	US 101	271	Jimmycomelately Cr Bridge	17.0285	2004	31.09	10.4	1,282,482
990254	SR 106	0.85	Skobob Cr Bridge	16.0004	2005	19.96	1.4	1,731,000
990713	SR 112	54.35	Bear Cr Culvert Replacement	19.0014	2006	17.21	3.7	466,151
990714	SR 112	24.91	Unnamed to Pyeht R Culvert Replacement	19.01138	2006	25.36	1.6	647,773
992190	SR 104	12.7	Unnamed tributary to Squamish Harbor Culvert Replacement	17.0153	2009	12.89	1.8	1,475,868
991908	US 101		Mosquito Cr Culvert Replacement	24.0137	2009	20.36	3.6	1,357,943
991244	SR 106	2.95	Unnamed tributary to Skokomish R Culvert Replacement	16.0002	2009	15.03	0.4	1,270,093
991742	SR 305	9.88	Bjorgen Cr Culvert Replacement	15.029	2010	17.21	1.5	2,258,000
990709	SR 305	9.6	Unnamed tributary to Liberty Bay Culvert Replacement	15.0291	2010	24.15	2.8	1,984,000
990032	US 101	102.1	Tributary to S Branch Big Cr Culvert Replacement	22.0059	2011	25.82	7.9	1,062,966
990729	US 101	100.9	Tributary to S Branch Big Cr Culvert Replacement	22.0059	2011	17.97	1.2	885,830
992493	US 101	65.99	Tributary to Lower Salmon Cr Culvert Replacement	24.0106	2011	14.46	4.6	1,595,251
			Region III Total Estimated Linear Habitat Gain (km):				144.722	
			Region III Total Estimated Expenditure:					20,183,746

*Fish passage project, which is currently a partial or a total barrier to fish passage. For more information refer to Appendix 1A.

Table 5. (cont.)

Region IV - SOUTHWEST

SiteId	Road	MP	Stream	WRIA	Year	PI	Potential Lineal Gain (km)	Cost $
990171	SR 6	8.9	Ostrea Cr Fishway Upgrade	24.0341	1997		1.8	8,000
990363	US 101	25.8	SF Nemah R Fishway	24.0503	1994	34.34	4.4	34,986
990211	SR 14	66	Jewett Cr Culvert Replacement	29.0342	1998	10.2	0.2	413,000
990035	SR 4	35.6	Birnie Cr Fishway	25.0281	1999	30.28	3.64	67,570
991684	SR 506	2.53	Unnamed tributary to Stillwater Cr Culvert Replacement	26.0479B	2000	16.62	1.3	99,000
990036	SR 409	3.85	Birnie Cr Fishway	25.0281	2001	28.98	0.26	322,000
990220	SR 4	4.5	Johnson Cr Culvert Replacement	24.0581	2001	28.74	3.4	209,000
991449	SR 503	49.03	Kenyon Cr Fishway	27.0320	2001	24.07	1.4	224,000
990071	SR 401	8.8	Cement Cr Fishway	24.0598	2002	36.55	6.5	200,000
990377	US 12	81.22	Silver Cr Culvert Replacement	26.0540	2003	33.83	6.8	527,000
992223	SR 142	11.4	Snyder Canyon Cr Fishway Tune up	30.0018	2006	23.19	6.3	**
30.0068 0.40	SR 142	20.2	Bowman Cr Bridge	30.0068	2006	32.35	36.7	1,495,495
992234	SR 122	4.99	Unnamed tributary to Mayfield Lake Culvert Replacement	26	2009	17.54	1.9	385,839
			Region IV Total Estimated Linear Habitat Gain (km):				74.958	
			Region IV Total Estimated Expenditure:					4,845,890

Region VI - EASTERN

SiteId	Road	MP	Stream	WRIA	Year	PI	Potential Lineal Gain (km)	Cost $
990299	SR 20	310	NF O'Brien Cr Culvert Replacement	52.0394A	2001	4.31	0.20	302,000
990300	SR 20	310.1	NF O'Brien Cr Culvert Replacement	52.0394A	2001	3.5	1.90	302,000
990312	SR 20	309.3	NF O'Brien Cr Culvert Replacement	52.0394	2001	6.29	11.70	302,000
			Region VI Total Estimated Linear Habitat Gain (km):				13.40	
			Region VI Total Estimated Expenditure:					906,000

**Combined with Bowman Cr bridge project

PROJECT EVALUATION AND MONITORING

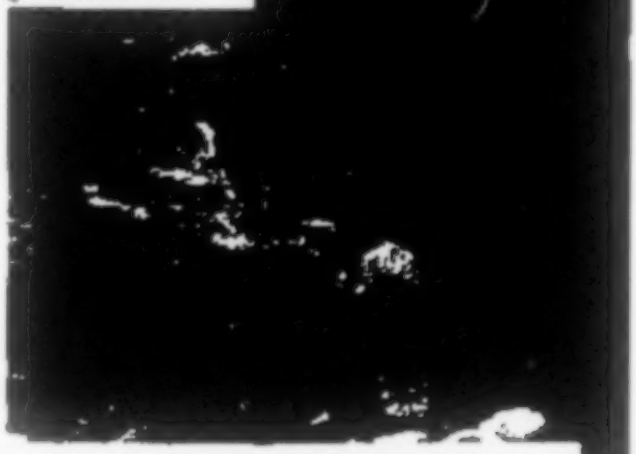
Evaluation of Stand-Alone I-4 Projects, Before and After Barrier Removal

The goal of the evaluation program is to:

- Determine fish utilization upstream and downstream of sites prior to and one year after project construction.
- Evaluate newly-constructed fish passage projects for design, durability, and efficiency immediately after construction and for one year following construction.

WDFW evaluates all fish passage barrier correction projects completed by WSDOT to ensure they are constructed according to fish passage criteria and designs and that they are functioning properly. All projects completed with dedicated funding are evaluated shortly after construction and for one year following construction. During this period, any construction deficiencies resulting in fish passage problems are noted and corrected whenever possible.

For a full list of spawner surveys conducted for dedicated funding projects that will be built in the near future, projects that were built in 2010 and 2011, as well as future projects refer to Appendix IV



Coho Salmon Spawning in Wagley's Creek

Adult spawner surveys are a direct way to determine species presence or absence above and below a newly completed fish passage project or to evaluate a pre-project barrier. Three such surveys are conducted for each project prior to construction and during the year following its completion. Typically, the surveys are conducted 500 meters below and above the project. The surveys may be shorter, if the distance to a confluence with a larger body of water downstream is less than 500 meters or if there is a natural barrier upstream within the 500 meters. If there is no spawning habitat within 500 meters upstream or downstream of the fish passage project, the survey may be relocated to where fish are likely to spawn.

Not all potential habitat may be utilized by salmonids immediately following a fish passage correction. In some cases it may take years before the newly opened habitat is utilized to its full potential. There are other factors influencing fish production. Among the many factors are surface water diversions, pollution, hydropower, unfavorable ocean conditions, predation, harvest, and general habitat degradation or loss.

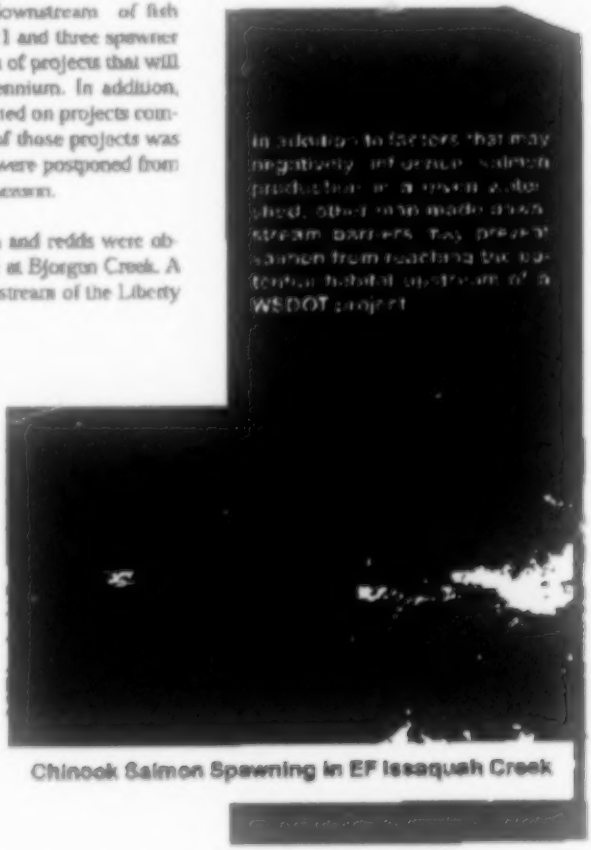
PROJECT EVALUATION AND MONITORING

If salmonids are not detected upstream of the fish passage project in the first year after construction, surveys may be performed in subsequent years.

In the fall of 2011, WDFW biologists conducted five spawner surveys upstream and downstream of fish passage projects completed in 2011 and three spawner surveys upstream and downstream of projects that will be completed within the next biennium. In addition, two spawner surveys were conducted on projects completed in 2010. The construction of those projects was delayed and the spawner surveys were postponed from the fall of 2010 to the fall of 2011 season.

Several spawned-out coho salmon and redds were observed upstream of the project site at Bjorgen Creek. A number of redds were observed upstream of the Liberty Bay project site.

No spawning salmon or redds were observed upstream of the three fish passage projects in the Olympic Region during the fall of 2011 spawner surveys. No spawning salmon nor redds were observed upstream of the tributary to Salmon Creek on US 101. There was no indication of salmon utilization of the upstream habitat on either of the tributary to Big Creek projects.



Chinook Salmon Spawning in EF Issaquah Creek

In November, 2011, adult coho salmon were observed spawning in the newly constructed channel at Wagley's Creek on US 2. Nine coho were observed passing through the newly constructed channel, under the bridge, utilizing the habitat that was blocked by an old dam that was removed in 2011.

Sixteen spawning chum salmon were observed downstream of Twanoh Falls Creek, a CED project that will be constructed in 2012. No spawning salmon were observed upstream of the Twanoh Falls Creek crossing. No spawning salmon were observed upstream or downstream of two other 2012 projects: Nelson Creek and a tributary to Pysht River.

COMPLETED FISH PASSAGE PROJECTS

Barriers Corrected through Transportation and Other Types of Funding Projects

WDFW has identified 172 fish passage projects that were carried out by WSDOT during transportation and other non-dedicated funding projects since 1955. In 2011, six fish passage barriers were corrected during road improvement projects. Two barrier culverts at unnamed tributaries to Lake Washington and one barrier culvert at a tributary to Yarrow Creek were replaced with fish passable culverts during a widening project on SR 520 (Figures 15, 16, and 17). Two fish passage projects were completed as part of the Chronic Environmental Deficiencies Program (CED): a total barrier culvert at Norris Slough on SR 105 was replaced with a bridge (Figures 21 and 22) and an undersized culvert that needed frequent maintenance was replaced with a bridge at Red Cabin Creek on SR 20 (Figures 23 and 24). During an I-5 widening project, a barrier culvert at an unnamed tributary to Dry Creek was replaced with a fish passable culvert (Figures 25 and 26).

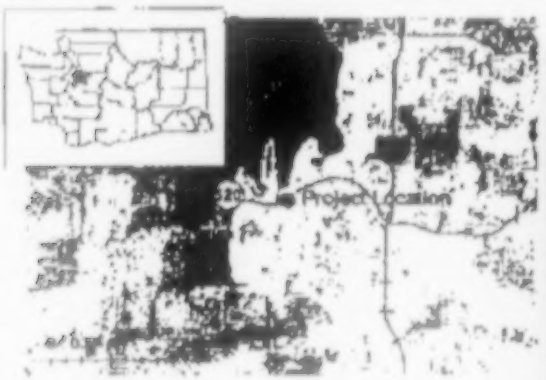
Table 6. Fish Passage Projects Completed in 2011 with Other Funding Sources

Site Id	WSDOT Region	Road	MP	Stream/ Project	WRIA	PI	Potential Lineal Gain (km)
[illegible]	NW	SR 520	[illegible]	Lake Washington tributary Culvert Replacement	[illegible]	[illegible]	[illegible]
964458	NW	SR 520	4.48	Lake Washington tributary Culvert Replacement	8.0257	14.8	2.40
[illegible]	NW	SR 520	3.81	Yarrow Creek [illegible] Culvert Replacement	[illegible]	6.32	0.52
990307	SW	SR 105	16.7	Norris Slough Bridge	24		3.5
[illegible]	NW	SR 20	73.75	Red Cabin C[illegible]	3.0348		14
999532	OLY	I-5	85.81	Dry Creek tributary Culvert Replacement	23		1.6

For a complete list of projects constructed with other types of funding see Table 7

An unnamed tributary to Lake Washington

Fish Passage Barriers Corrected during Transportation Projects



The unnamed tributary to Lake Washington crosses SR 520 at mile post 14.61. This project is located in the Northwest Region in Hunts Point, east of the city of Bellevue.

Before Construction

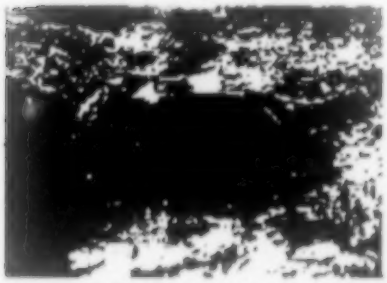
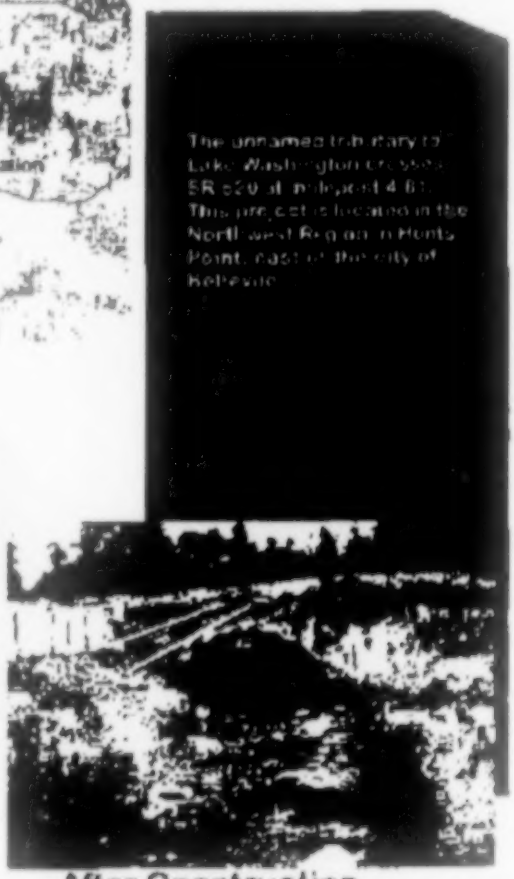


Figure 15. The old crossing consisted of a round corrugated steel culvert, 1.2 meters (3.9-foot) wide. The culvert was assessed as a barrier due to a 4.2% slope.



After Construction

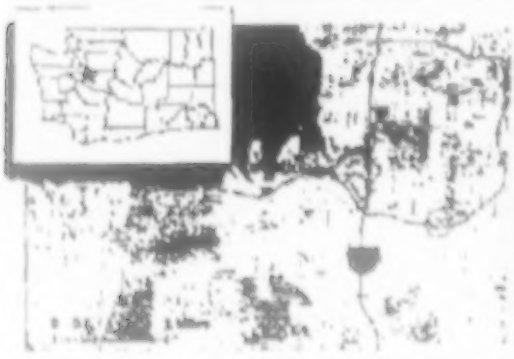
Figure 16. The new crossing is a corrugated aluminum arch culvert, 3.75 meter (12-foot) wide with natural streambed material placed inside to simulate natural stream conditions throughout the culvert. This fish passage project restored over one kilometer (0.62 miles) of potential habitat for coho salmon, and steelhead, searun and resident cutthroat trout.

Figure 17. The old crossing consisted of a round corrugated steel culvert, 1.52 meters (5-foot) wide. The culvert was assessed as a barrier due to a 3% slope.

Figure 18. The new crossing is a corrugated aluminum arch culvert, 3.8 meters (12-foot) wide, with natural streambed material to simulate a natural condition throughout the culvert. This fish passage project restored access to 2.4 kilometers (1.5 miles) of potential habitat for coho salmon, and steelhead, searun and resident cutthroat trout.

An unnamed tributary to Yarrow Creek

Fish Passage Barriers Corrected during Transportation Projects



The unnamed tributary to Lake Washington crosses SR 520 at milepost 5.81. The project is located in the city of Kirkland, Northwest Region.

Before Construction

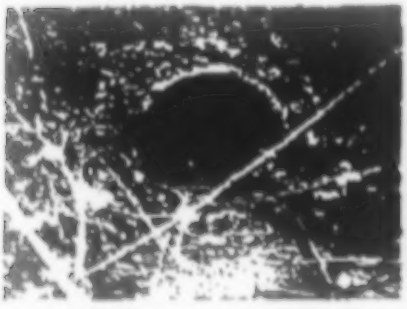


Figure 19. The old crossing consisted of a round concrete culvert, 1.27 meters (4.2-foot) in diameter. The culvert was assessed as a barrier due to a 3% slope.

After Construction

Figure 20. The new crossing is a concrete box structure, 3.6 meters (12-foot) wide with natural streambed material placed inside to simulate natural stream conditions throughout the culvert. This fish passage project restored access to 2.4 kilometers (1.5 miles) of potential habitat for coho salmon, and steelhead, searun and resident cutthroat trout.

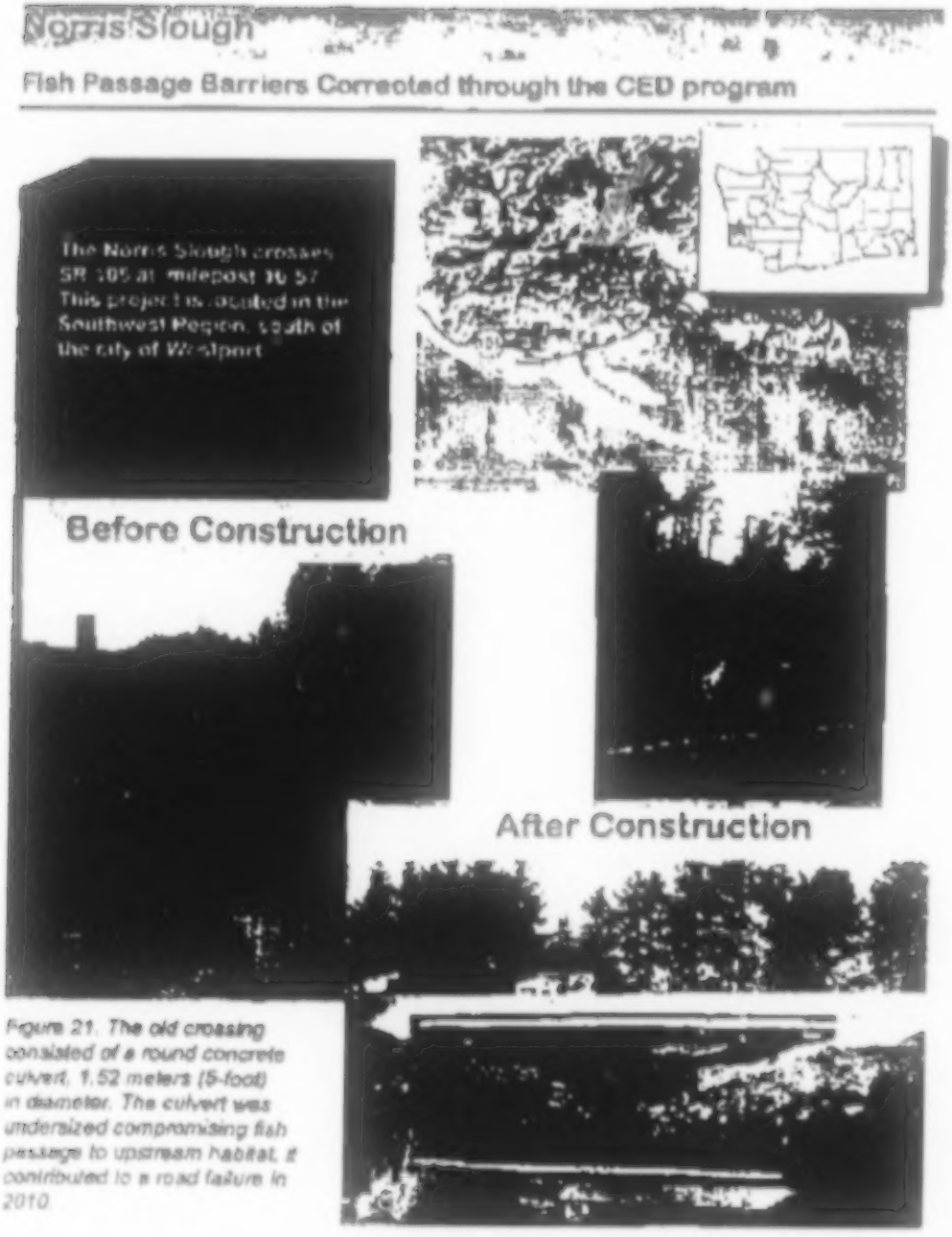


Figure 21. The old crossing consisted of a round concrete culvert, 1.52 meters (5-foot) in diameter. The culvert was undersized compromising fish passage to upstream habitat, it contributed to a road failure in 2010.

Figure 22. The new concrete bridge, 26.51 meters (87-foot) wide, restored access to 2.5 kilometers (1.5 miles) of potential habitat for coho and chum salmon, and steelhead, searun and resident cutthroat trout.

Red Cabin Creek

Fish Passage Barriers Corrected through the CED program

The Red Cabin Creek crosses SR 20 at milepost 75.75. This project is located in the Northwest Region, east of the city of Sedro-Woolley.

Figure 23. The old crossing was a twin concrete box culvert, 2.14 meters (7-foot) each that was undersized and periodically filled with sediments blocking fish access to the upstream habitat.

Figure 24. The new, 20.72 meters (68-foot) concrete bridge restored access to 14 kilometers (8.7 miles) of potential habitat for coho, chum, and Chinook salmon, and steelhead, searun and resident cutthroat trout.

An Unnamed Tributary to Dry Creek

Fish Passage Barriers Corrected during Transportation Projects

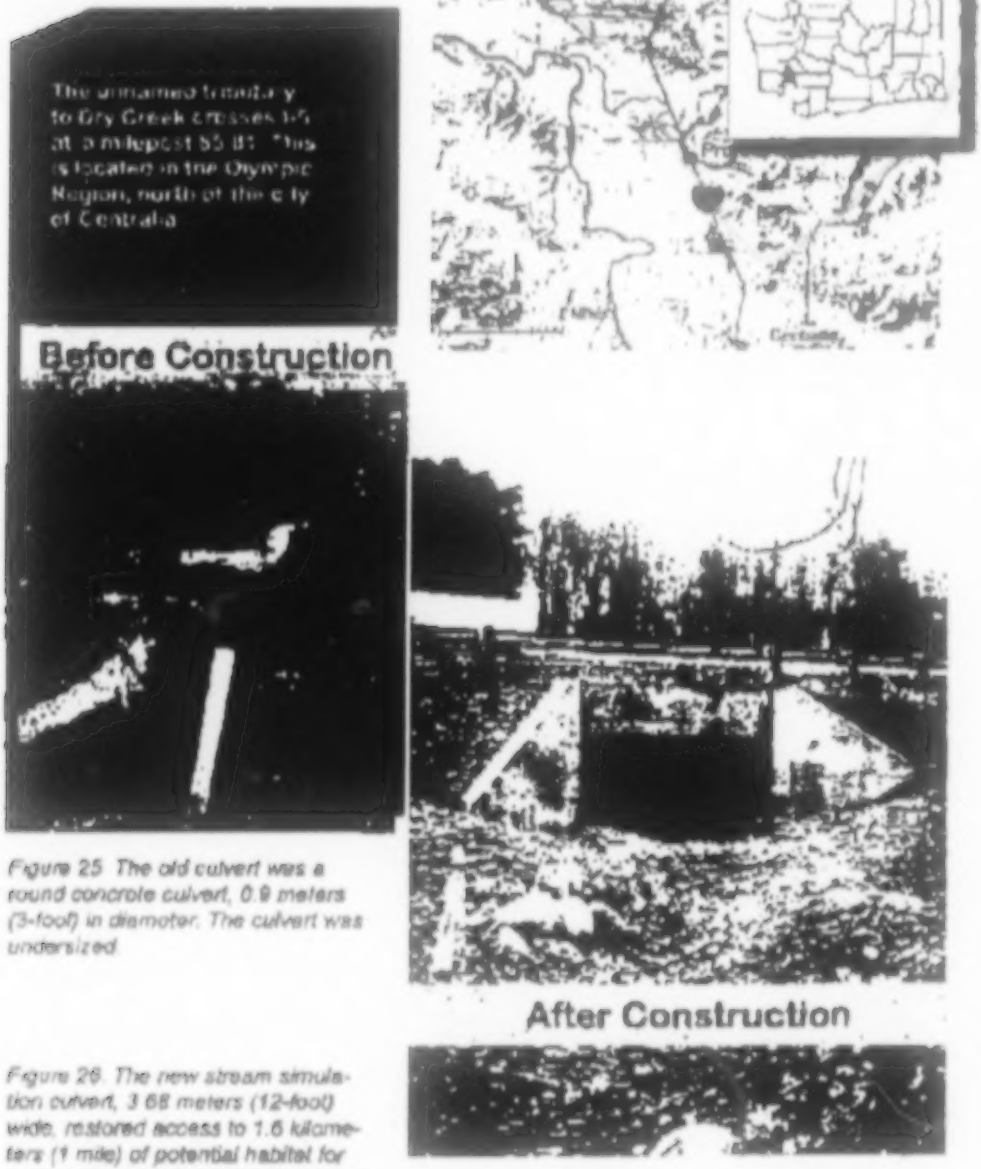


Figure 25. The old culvert was a round concrete culvert, 0.9 meters (3-foot) in diameter. The culvert was undersized.

Figure 26. The new stream simulation culvert, 3.66 meters (12-foot) wide, restored access to 1.6 kilometers (1 mile) of potential habitat for coho salmon, and steelhead, searun and resident cutthroat trout.

Table 7. Fish Passage Projects Completed through Other Funding Sources

WSDOT Region	Site Id	Road	MP	Stream	WRIA	Year	PI	Potential Lineal Gain (km)	Fish Passage Satisfactory Yes/No
3	999480	SR 112	49.48	Whiskey Cr	19.0020	1955	12.73	2.72	No
1	05.0018 2.00	SR 532	6.14	Church Cr	05.0018	1961	36.1	27.69	No
3	15.0051 0.10	SR 302	11.36	Little Minter Cr	15.0051	1982	20.47	6.10	No
3	15.0051 0.20	SR 302	11.42	Little Minter Cr	15.0051	1982	20.73	5.50	No
1	14.0010 0.10	US 101	356.8	Countyline Cr	14.0010	1985	17.21	0.75	Yes
3	14.0009A 0.06	US 101	357.9	Holiday Valley Cr	14.0009A	1986		1.77	Yes
1	03.0354A 0.04	SR 20	77.7	Little Careys Cr	03.0354A	1987		0.85	No
1	08.0049 3.00	I-5 NB	177.67	McAleer Cr	08.0049	1988		4.51	Yes
4	27.0300 0.00	SR 503	52.1	Robinson Cr	27.0300	1989		0.48	Yes
3	18.0021 5.40	US 101	260.93	Matriotti Cr	18.0021	1989	14.71	8.08	No
1	996965	I-90	20.42	EF Issaquah Cr tributary	08.0186	1990		1.86	Yes
1	01.0228 4.80	SR 542	6.55	Anderson Cr	01.0228	1990		16.04	No
1	995415	I-5	246.73	Chuckanut Cr	01.0626	1993	9.24	1.15	No
3	15.0280 1.00	SR 308	1.15	B.J. Scandia Cr	15.0280	1993	21.00	6.43	No
1	08.0302 0.00	SR 169	23.62	Maplewood Cr	08.0302	1994		1.93	Yes
5	990189	US 97	37.14	Highbridge Springs	37	1994	6.13	1.13	No
1	08.0077 0.20	SR 527	6.57	Penny Cr	08.0077	1994	24.56	13.46	No
1	990644	SR 530	31.01	Stillaguamish R tributary	05	1995	14.36	1.30	No
1	991168	SR 530	31.9	Stillaguamish R tributary	05	1995		0.20	Yes
3	996952	SR 168	3.8	Curley Cr	15	1995		16.31	Yes
1	08.0070A 0.01	SR 527	4	Sulphur Springs Cr	08.0070A	1995		0.32	Yes
1	990272	SR 104	29.65	McAleer Cr	08.0049	1995	48.75	5.35	Yes
1	08.0075 0.70	SR 527	4.46	Silver Cr No2	08.0075	1995		2.58	Yes
1	08.0070B 0.30	SR 527	6.32	Nickel Cr	08.0070B	1995		1.29	Yes
1	991164	SR 530	32.71	Stillaguamish R tributary	05	1996		0.16	No
1	991154	SR 530	55.07	Hatchery Cr	08.1062	1996		0.33	Yes
1	990064	SR 18	19.76	Carey Cr	08.0218	1996		18.22	Yes
1	991059	SR 531	8.71	MF Quilceda Cr	07	1996	16.23	2.84	No
1	991162	SR 530	31.2	Stillaguamish R tributary	05.0168X	1996		0.20	Yes
1	990271	SR 530	29.63	Mc Govern Cr	05.0168	1996		8.52	Yes
1	991519	SR 18	19.59	Carey Cr tributary	08.0218A	1996	16.25	1.75	Yes
1	991153	SR 530	55.9	Skagit R tributary	04.0707	1996		0.11	Yes
4	992462	US 101	28.92	Roaring Cr St	24.0563	1997		0.41	Yes
3	990156	US 101	186.41	Frakker Cr	20.0237O	1997		1.02	Yes
3	990164	US 101	186.3	Fulvmas Cr	20.0237E	1997		0.50	Yes

Table 7. Fish Passage Projects Completed through Other Funding Sources

WSDOT Region	Site Id	Road	MP	Stream	WRIA	Year	PI	Potential Lineal Gain (km)	Fish Passage Satisfactory Yes/ No
1	980716	US 101	186.45	Prekker Cr tributary	20.0231K	1997		0.20	Yes
3	991512	US 101	186.7	Forgotten Marsh	20.0237N	1997		0.26	Yes
3	991644	US 101	175.17	Old Joe Sl tributary	20.0440B	1997		0.10	Yes
6	990311	SR 20	389.5	Renshaw Cr	62.0310	1997		4.47	No
1	990390	SR 18	8.9	Sweetie Cr	09.0073	1997	16.54	7.58	No
3	22.0349 0.70	US 12	17.36	Mescelf Sl tributary	22.0349	1997		9.98	Yes
1	991155	SR 530	54.6	Lyle Cr	04.1064	1997		2.80	Yes
6	990310	SR 20	388.13	Renshaw Cr	62.0310	1997		0.12	No
3	991532	US 12	13.8	Chehalis R tributary	22.0354	1998		3.85	Yes
6	990250	SR 20	384.95	Lost Cr	62.0322	1998		13.93	No
3	990249	US 101	174	Lost Cr	20.0440	1998	17.72	1.34	Yes
1	101S-23	SR 203	7.83	Harris Cr tributary	07.0285	1998		5.85	Yes
3	105 R050320a	SR 167	12.05	Jovita Cr	10.0033	1998	22.4	4.08	No
1	997679	SR 509	25.69	Miller Cr	09.0371	1998	11.79	5.78	No
4	990116	SR 142	5.2	Dillepart Cr	30.0009	1998	7.55	0.97	Yes
3	991852	SR 303	6.9	Barker Cr	15.0255	1998		4.44	Yes
1	07.0383A 0.50	SR 202	13.8	Dry Cr	07.0383A	1998		3.82	Yes
3	990121	SR 305	12.8	Dogfish Cr	15.0285	1998		14.96	Yes
1	994239	SR 520	8.27	Yarrow Cr	08.0252	1998		3.22	Yes
4	990119	SR 14	55.8	Dog Cr	29.0130	1998		0.12	No
4	990948	US 12	127.44	Dry Cr	26.1119	1999		3.45	Yes
4	991698	US 101	24.13	Willapa Bay tributary	24.0673	1999	21.45	0.67	Yes
3	991690	US 101	111.9	Stevens Cr tributary	22	1999	10.83	0.97	No
3	990370	US 101	399.6	Schneider Cr	14.0009	1999		11.60	Yes
4	992272	I-5	42.4	Cowlitz R tributary	26.0129	1999	12.05	1.19	Yes
6	990881	SR 20	380.1	Lk Thomas tributary	59	2000		0.56	No
1	105 R071916a	SR 410	40.59	Boundary Cr	10.0250	2000	7.55	0.60	No
5	990436	US 97	57.2	Toppenish Cr	37.1178	2000		21.13	Yes
3	991295	SR 105	31.1	South Bay tributary	22	2000		0.20	Yes
1	991768	SR 20	90.13	Skagit R tributary	04	2000		0.28	Yes
1	990294	SR 528	2.47	Manson Cr	07.0073	2000		1.09	No
1	DM10	SR 20	114.94	Damnation Cr	04.1844	2001		2.38	Yes
3	991729	SR 112	19.56	Clallam R tributary	19	2001	7.5	0.20	Yes
4	991397	SR 4	25.91	Skamokawa R tributary	25	2001		0.34	Yes
4	992271	SR 142	3.65	Knight Cr	30.0008	2001		11.57	Yes

Table 7. Fish Passage Projects Completed through Other Funding Sources

WSDOT Region	Site Id	Road	MP	Stream	WRIA	Year	PI	Potential Lowest Gain (km)	Fish Passage Satisfactory Yes/No
5	991545	SR 112	19.49	Clallam R tributary	19.0129A	2001	10.43	0.20	Yes
4	990164	SR 112	48.49	Field Cr	19.0076	2001	17.39	8.91	No
6	992006	SR 21	172.17	Lambert Cr	60.0327	2001	5.96	19.27	Yes
1	990625	SR 9	38.57	Stillaguamish R tributary	05.0080H	2002		1.06	Yes
1	NC180	SR 9	39.69	Lk McMurray tributary	03	2002	9.22	0.35	No
1	NC170	SR 9	39.87	unnamed	03	2002	5.46	0.79	No
1	LP28	SR 9	35.7	unnamed	05	2002		0.20	Yes
1	LP23	SR 9	35.46	Pilchuck Cr tributary	05.0090B	2002		1.73	Yes
1	LP77	SR 9	35.52	unnamed	05.0080C	2002		0.30	Yes
1	993115	I-405	29.67	Martha Cr	06	2002	11.21	2.82	Yes
1	LP33	SR 9	28.69	unnamed	05	2002		0.79	No
1	991166	SR 9	32.2	Stillaguamish R tributary	05.0129A	2002		0.55	No
1	995100	SR 9	69.88	Samish R tributary	03	2002		0.65	No
2	990202	US 97	156.32	Iron Cr	39.1209	2002		13.83	No
5	990609	SR 410	82.8	Wash Cr	38	2002	5.41	0.72	No
1	990262	SR 522	1.87	Maple Leaf Cr	08.0033	2002	13.29	2.35	Yes
1	08.0110 0.10	SR 202	18.00	Rutherford Cr	08.0110	2002		1.77	Yes
1	990364	SR 9	28.38	Portage Cr	05.0036	2002		7.11	Yes
5	990400	SR 241	9.17	Sulphur Springs tributary	37	2002		4.13	Yes
1	995981	SR 9	0.88	Little Bear Cr tributary	08	2003		0.66	Yes
1	991189	SR 527	6.99	North Cr tributary	08	2003		0.50	Yes
1	08.0183 1.00	I-90	17	EF Issaquah Cr	08.0183	2003		9.98	Yes
1	1015-27	SR 203	12.76	Deer Cr	07	2003		1.17	Yes
4	991415	SR 401	3.22	Columbia R tributary	24	2003		1.50	Yes
1	991199	SR 167	23.65	Upper Springbrook Cr	09.0020	2003		0.86	Yes
4	990180	SR 21	155.06	Golden Harvest Cr	52.0352	2003		21.77	Yes
1	995977	SR 20	25.77	Penn Cove tributary	06.0003	2003		1.28	Yes
1	990298	SR 18	12.7	Jenkins Cr	09.0087	2003		16.38	Yes
1	990299	SR 18	13.8	Jenkins Cr	09.0087	2003		8.21	Yes
3	990910	SR 106	6.95	Dalby Cr	14	2003	20.16	0.85	Yes
1	995578	SR 542	64.14	Nooksack R tributary	01	2004		0.20	Yes
1	990434	SR 542	15.32	Jim Cr	01	2004		0.95	Yes
1	105 SR12018a	SR 509	10.71	Lakota Cr	10.0366	2004		2.13	Yes
3	115 MC170	SR 106	7.06	Alderbrook Cr	14	2004		0.91	Yes
1	991466	SR 167	25.65	Springbrook Cr tributary	09.0006	2004		5.99	Yes

Table 7. Fish Passage Projects Completed through Other Funding Sources

WSDOT Region	Site Id	Road	MP	Stream	WRIA	Year	PI	Potential Linear Gain (km)	Fish Passage Satisfactory Yes/ No
1	990156	SR 11	6.94	Edison Sl	03.0001	2004		14.13	Yes
4	992311	US 101	53.86	Old Mill Pond Cr	24	2004	13.68	0.64	Yes
1	995580	SR 542	44.34	Nooksack R tributary	01	2004		0.20	Yes
1	990016	SR 522	18.77	unnamed	07	2005	6.42	0.37	Yes
3	991636	SR 706	8.02	Nisqually R tributary	11.0008A	2005		7.26	Yes
5	990995	SR 261	5.5	Tucannon R tributary	35	2005		2.00	No
1	995582	SR 542	45.51	Nooksack R tributary	01	2005		0.17	Yes
1	102 N171	SR 527	7.38	Mill Cr	08.0070	2005		1.12	Yes
3	991227	SR 706	9.81	Nisqually R tributary	11.0222	2005		0.33	Yes
3	991275	US 101	130.6	Ten O'Clock Cr tributary	21	2005		0.24	Yes
1	991620	SR 161	31.9	SF Hylebos Cr tributary	10.0016A	2005		2.14	Yes
1	991576	SR 18	18.19	Taylor Cr	08.0326	2005	20.54	3.35	Yes
1	990426	SR 18	18.43	Taylor Cr	08.0326	2005	27.48	1.64	Yes
1	995087	SR 527	9.33	Reggs R tributary	08	2005		0.29	Yes
1	995584	SR 542	45.57	Nooksack R tributary	01	2005		0.73	Yes
2	992058	SR 262	13.19	Irrigation Ditch	41	2005		11.00	Yes
1	992374	SR 522	18.44	Evans Cr tributary	07.0211	2005	21.2	2.70	Yes
1	991196	SR 99	13.94	McSorley Cr	9.0381	2005		1.05	No
1	08.0320 1.30	SR 18	16.94	Downs Cr	08.0320	2006		7.24	Yes
1	990376	I-405	19.12	Forbes Cr	08.0342	2006	5.24	1.30	No
1	370220	SR 9	96.1	Easterbrook Cr	01.0606	2006		0.74	Yes
1	370219	SR 9	96.6	Bone Cr	01.0605	2006		4.40	Yes
3	15.0285 H 0.50	SR 305	12.34	SF Dogfish Cr	15.0285 H	2006		1.59	Yes
3	990998	SR 305	11.62	SF Dogfish Cr	15	2006	15.7	1.54	Yes
2	991054	SR 305	12.20	SF Dogfish Cr	15	2006		0.67	Yes
1	995980	SR 9	0.97	Little Bear Cr tributary	08	2006		0.50	Yes
1	990316	SR 9	1.16	Cutthroat Cr	08.0083	2006	22.56	3.86	No
1	995979	SR 20	14.55	Crockett Lk	06.0053	2006		2.86	Yes
6	991471	SR 31	18.72	Three Mile Cr	62.0053	2006		0.29	Yes
3	991853	SR 305	12.1	SF Dogfish Cr	15	2006		1.11	Yes
3	991566	SR 303	5.6	Steele Cr	15.0274	2007		3.20	Yes
1	990578	SR 542	38.3	Boulder Cr tributary	01.0425	2007		3.16	Yes
1	996459	SR 524	13.05	Whistle Cr	08	2007		0.20	Yes
1	981700	SR 548	6.35	Terrell Cr	01.0089	2007	46.82	6.85	Yes
5	990088	SR 24	1.07	Bias E	37	2007		2.70	Yes

Table 7. Fish Passage Projects Completed through Other Funding Sources

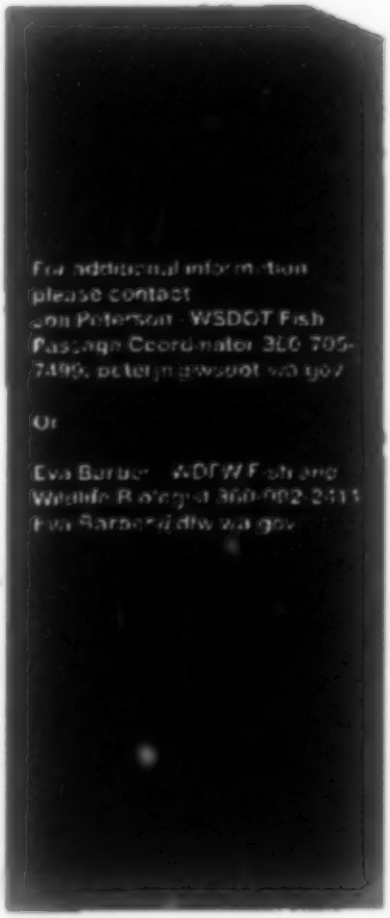
WSDOT Region	Env Id	Road	MP	Stream	WRIA	Year	PI	Potential Lineal Gain (km)	Fish Passage Satisfactory Yes/ No
2	992705	SR 207	1.3	Nisqua Cr tributary	45	2007		1.08	Yes
2	995038	US 2	57.8	Tye R tributary	07	2007		0.23	No
3	990122	SR 307	0.07	Dogfish Cr	15.0285	2007	32.07	14.94	Yes
6	995837	SR 270	4.29	Paradise Cr tributary	34	2007		7.44	Yes
6	999625	SR 270	9.08	Paradise Cr tributary	34	2007		2.59	Yes
2	994035	SR 20	278.6	Bonaparte Cr	49.0246	2007	6.62	17.68	No
4	994652	I-5	11	Gee Cr tributary	27.0168A	2008	13.95	2.07	Yes
1	991687	SR 9	31.01	Kackman Cr	01	2008		0.78	Yes
1	991661	SR 534	9.1	Pilchuck Cr	05	2008	12.28	8.15	Yes
1	985209	SR 96	3.96	unnamed	07	2008		8.08	Yes
3	999499	US 12	519.35	Touchet R	32	2008			No
1	991109	SR 539	2.86	Baker Cr tributary	04.0553	2008		0.38	Yes
1	1294060	SR 543	20.29	Boulder Cr tributary	01.0425	2008		0.56	Yes
1	990112	SR 539	4.3	Deer Cr	01.0169	2008	31.44	2.61	Yes
1	FD01	SR 20	44.74	Meadow Cr	05	2008	28.68	8.28	Yes
1	991184	SR 900	20.09	Clay Cr	08.0172	2009	9.49	0.28	Yes
1	991723	SR 900	20.34	Tibbetts Cr tributary	08.0171	2009	12.47	0.65	Yes
1	990946	SR 542	28.76	Bruce Cr	01	2009	8.36	5.15	Yes
3	990159	SR 16	20.96	Burley Cr tributary	15	2009		0.18	Yes
3	993176	SR 16	20.2	Burley Cr tributary	15	2009		0.24	Yes
4	994206	I-5	74.09	Barnwick Cr	23.0081	2009		61.38	Yes
5	991080	SR 542	16.07	Nooksack R tributary	01	2010		0.28	Yes
4	992821	US 101	3.3	Columbia R tributary	24	2010	27.23	8.68	Yes
6	997498	US 2	296.35	Deadman Cr	55.0051	2010		92.20	Yes
4	998530	SR 270	40.09	Pine Cr tributary	34	2010		7.59	Yes
3	981252	US 101	335.02	Hood Canal tributary	16.0218	2010	12.34	0.21	Yes
1	AR10	SR 20	75.75	Red Cabin Cr	3.0045	2011		16	Yes
1	994119	SR 530	9.81	Varney Cr tributary	5	2011	6.36	0.52	Yes
1	990987	SR 530	4.81	Lake Washington tributary	8	2011		1.05	Yes
1	994459	SR 520	4.48	Lake Washington tributary	8.0257	2011	14.8	2.40	Yes
3	999332	I-5	85.81	Dry Cr tributary	22	2013		1.6	Yes
4	990307	SR 105	16.57	Morris Sl	24	2011		2.5	Yes

QUESTIONS AND ANSWERS

Commonly Asked Questions about WSDOT Fish Passage Barrier Culverts

How can I find out if there are fish passage barriers in my project area?
A list of WSDOT fish passage culverts can be found in the WSDOT Fish Passage Inventory Annual report, which is located on WSDOT's Biology Program Web Page.

What is a PI?
PI stands for Priority Index and is a numeric indicator used to consolidate the many factors related to a fish barrier removal project prioritization (such as expected passage improvement, production potential of the blocked stream, fish stock health, etc.). The PI is used for developing prioritized lists of stand-alone fish barrier removal projects. Stand-alone fish barrier removal projects are prioritized by WDFW to target sequential correction of barriers that have the largest gains in fish habitat and the greatest production benefits for fish (higher the PI the greater the benefits). The PIs for most culverts are listed in the WDFW database and are included in the Appendix C of each WSDOT region.



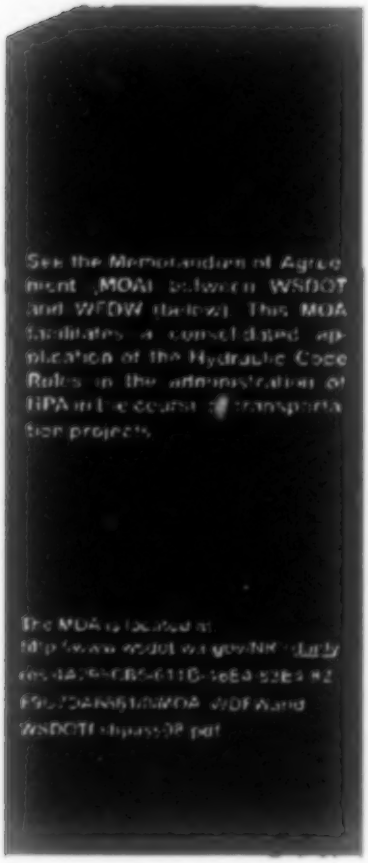
What if a culvert barrier does not have a PI? Does that mean the culvert is a low priority?
It means that WDFW inventoried the culvert but has not yet completed the habitat assessment work necessary to calculate the PI. The PI plays an important role in the prioritization of I-4 Fish Barrier removal projects; however, it should not be a factor in deciding which culverts are replaced as part of a highway project.

What about a culvert that is listed as a partial barrier – does it still need to be fixed?
The culvert is still considered a barrier. The percent passability is factored into the PI. A partially passable culvert will have a lower PI than a totally impassable culvert with all other factors being equal.

A culvert on a highway project has a low PI. Does this mean that it doesn't need to be fixed?
If a transportation (safety or mobility) project involves work on a fish barrier culvert that requires a Hydraulic Project Approval (HPA), then WSDOT is required to fix the barrier as part of that project.

What if there is conflicting information about whether a culvert within a project boundary is a barrier or not – what should be done to resolve this?
Contact Jon Peterson at WSDOT or Eva Barber at WDFW to determine if the culvert is a barrier or not.

A fish passage barrier culvert within a project's limit has less than 200 meters of habitat upstream from the culvert. Does it need to be fixed?



If work on the culvert requires an HPA then yes, the culvert needs to be corrected or replaced. The minimum 200 meters of habitat criteria is used for stand-alone culverts being corrected using I-4 funds and not those being fixed as part of a highway construction project.

Should a fish passage barrier culvert that will cost several million dollars be replaced with a fish passable one if it only provides access to a very short degraded section of stream that ends in a storm water pond?
In very rare cases, an exception may be made if it is determined that a barrier correction requiring an HPA would provide an extremely minimal gain for fish and require extraordinary high cost. Consideration of this exception would require agreement with WDFW and would not be based on the presence of other human-made barriers in the stream. In this case, it is understood that WSDOT is ultimately responsible to correct the barrier in the future, and would be required to provide mitigation to compensate for the habitat loss resulting from the presence of the barrier until it is corrected. The Memorandum of Agreement (MOA) between WSDOT and WFDW facilitates a consolidated application of the Hydraulic Code Rules in the administration of HPA in the course of transportation projects.

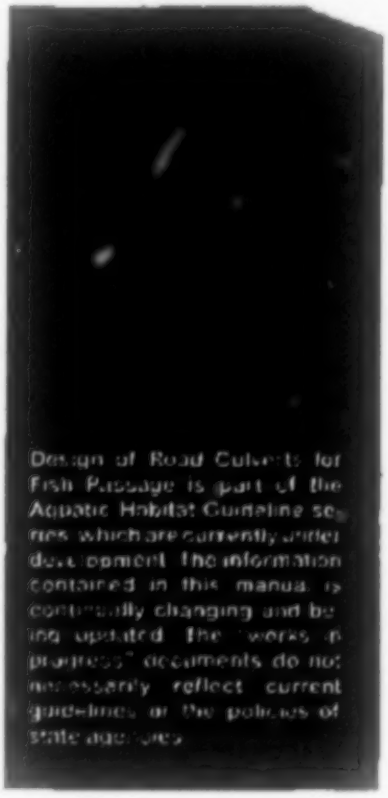
While getting ready to complete permitting for a project, two new fish barrier culverts were discovered. There are no funds left in the project; can I-4 funds be used to fix these culverts?
This question emphasizes the importance of early identification of deficiencies that need to be fixed as part of any highway safety and mobility construction project. I-4 funds are not available to fix culverts that would ordinarily be fixed as part of a highway construction project (no matter when they are found in the project process). This would defeat the purpose of having a stand-alone program targeting the highest priority culverts that would otherwise not be corrected during a highway project anytime in the near future.

A project office has been assigned to design a fish passable culvert. Are there any guidelines to help in designing this project?

Design of fish barrier correction is based on the latest version of WDFW's Design of Road Culverts for Fish Passage manual (available on line at http://wdfw.wa.gov/publications/pub.php?id=00049). Engineering assistance and guidance is also available by contacting WDFW's Restoration Division (formerly Technical Applications Division).

Does a barrier culvert within a road project that does not need an HPA need to be fixed as part of this highway project?

Serious consideration should be given to correcting the barrier, even though WSDOT is not required to do so according to the MOA. The cost of the barrier correction relative to the overall cost of the project should be considered. Also, in this case, the quantity and quality of the upstream habitat should be considered in making the decision. Opportunities to correct barriers should be capitalized on during projects while crews and equipment are mobilized to significantly reduce the number of fish passage barriers under state highways. If the barrier is not fixed during the road project, it remains on the barrier list and must be fixed at some point in the future. Sometimes avoiding fixing the culvert during the current highway project may make future corrections more difficult and costly, if for example, the current project buries the culvert with fifty feet of fill or blocks it with a retaining wall.



Design of Road Culverts for Fish Passage is part of the Aquatic Habitat Guideline series which are currently under development. The information contained in this manual is continually changing and being updated. The "works in progress" documents do not necessarily reflect current guidelines or the policies of state agencies.

The plans to widen the road over a fish passage barrier culvert include construction of vertical retaining walls to avoid touching the culvert and an HPA. Is that OK?

Under the MOA, technically the answer is yes. If a project does not require an HPA there is no requirement to make the culvert fish passable. However, project offices should carefully consider the cost of making it passable at some future date after the construction of the retaining walls. The barrier will need to be fixed eventually, so any action taken to avoid correcting the barrier will only add to the cost of making it passable in the future.

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHIGNTON, et al., Defendants.	No. C70-9213 Subproceeding No. 01-1 (Culverts) PERMANENT INJUNCTION REGARDING CULVERT CORRECTION

This matter came before the Court for trial beginning on October 13, 2009, for the purpose of determining the appropriate remedy for the violation by the defendants of certain of the Plaintiff Tribes' rights under treaties between the Tribes and the United States. By amended order dated August 23, 2007, the Court has ruled that the State of Washington has built and currently operates stream culverts that block fish passage to and from the Tribes' usual and accustomed fishing places, depriving the Tribes of the fishing rights reserved in the treaties. The Court has carefully and fully considered the Court's prior rulings in this subproceeding, the evidence presented at the remedy phase trial, the pre-trial and post-trial briefings of the parties, the arguments of counsel and applicable law, and on March 29, 2013 entered Findings of Fact and Conclusions of Law. Based upon the foregoing, it is hereby:

Ordered, adjudged and decreed that the State of Washington, the Washington State Department of Transportation (WSDOT), the Washington State Department of Fisheries and Wildlife (WDFW), the Washington State Department of Natural Resources (DNR), and the Washington State Parks and Recreation Commission (State Parks), their agents, officers, employees, successors in interest, and all persons acting in concert or participation with any of them (Defendants), are permanently enjoined and restrained to obey, to respect, and to comply with all rulings of this Court in this subproceeding and with each provision of this injunction, subject only to such modifications as may be approved by the Court in the future.

1. As used in this injunction, the word "culvert" shall mean any structure, other than a full-span bridge or tide gate, that is constructed to convey water beneath a roadway, and shall also include associated fishways or other fish passage structures, and bridges built to replace any culvert that is subject to this injunction. The word "salmon" shall mean any of the six species of anadromous salmonids of the genus Oncorhynchus, commonly known as chinook, chum, coho, pink, and sockeye salmon, and steelhead.

2. Within six months of the date of this injunction, the Defendants, in consultation with the Plaintiff Tribes and the United States, shall prepare a current list, or lists if different by agency (the List), of all culverts under state-owned roads within the Case Area existing as of the date of this injunction, that are salmon barriers. In compiling the List, the Defendants shall use the barrier assessment methodologies in the Fish Passage Barrier and

Surface Water Diversion Screening Assessment and Prioritization Manual (WDFW 2000) (WDFW Assessment Manual).

3. In addition to compiling the List, the Defendants shall make ongoing efforts to assess and identify culverts under state-owned roads in the Case Area that become partial or full barriers to salmon passage after the entry of this Injunction, using the WDFW Assessment Manual or any later state barrier assessment standards, provided such standards are consistent with the terms of this injunction.

4. Any new culvert constructed by the Defendants in the future on salmon waters within the Case Area and any future construction to provide fish passage at State barrier culverts on such waters shall be done in compliance with the standards set out in this injunction.

5. By October 31, 2016, WDFW, DNR, and State Parks shall provide fish passage in accordance with the standards set out in this injunction at each barrier culvert on the List located on lands owned or managed by those agencies in the Case Area.

6. Within 17 years of the date of this injunction, WSDOT shall provide fish passage in accordance with the standards set out in this injunction at each barrier culvert on the List owned or managed by WSDOT if the barrier culvert has 200 lineal meters or more of salmon habitat upstream to the first natural passage barrier.

7. WSDOT shall provide fish passage in accordance with the standards set out in this injunction at each culvert on the List having less than

200 lineal meters of upstream salmon habitat at the end of the culvert's useful life, or sooner as part of a highway project, to the extent required by other applicable law.

8. Notwithstanding the provisions of paragraph 6, above, WSDOT may defer correction of an aggregation of culverts that cumulatively comprise barriers to no more than 10% of the total salmon habitat upstream of those WSDOT culverts that would otherwise be subject to correction on the schedule set forth in Paragraph 6, but only upon fulfillment of the following conditions: In consultation with the Plaintiff Tribes and the United States, the Defendants shall develop and complete an assessment of the amount of salmon habitat upstream of each WSDOT barrier culvert on the List for which a "full physical survey," as described in § 3.4 of the WDFW Assessment Manual, has not been completed as of the date the List is compiled. In conducting the assessment, the Defendants shall use the full physical survey methodology or such other methodology as the parties may agree upon. Each correction deferred by this provision shall be corrected to the standards of this injunction at the end of the culvert's useful life, or sooner as part of a highway project, to the extent required by other applicable law. In undertaking the corrections, the Defendants shall be guided by the principle of providing the greatest fisheries habitat gain at the earliest time. The Defendants may utilize the "Priority Index" methodology described in the WDFW Assessment Manual in determining the sequence of correction if they so desire.

9. In carrying out their duties under this injunction, the Defendants shall design and build fish

passage at each barrier culvert on the List in order to pass all species of salmon at all life stages at all flows where the fish would naturally seek passage. In order of preference, fish passage shall be achieved by (a) avoiding the necessity for the roadway to cross the stream, (b) use of a full span bridge, (c) use of the "stream simulation" methodology described in Design of Road Culverts for Fish Passage (WDFW, 2003) or Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings (U.S. Forest Service, May 2008), which the parties to this proceeding have agreed represents best science currently available for designing culverts that provide fish passage and allow fluvial processes. Nothing in this injunction shall prevent the Defendants from developing and using designs other than bridges or stream simulation in the future if the Defendants can demonstrate that those future designs provide equivalent or better fish passage and fisheries habitat benefits than the designs required in this injunction.

10. In rare circumstances, Defendants may deviate from the design standards in paragraph 9, above, if they can establish or the parties agree that use of the standards required in paragraph 9 is not feasible because of: (a) an emergency involving an immediate threat to life, the public, property, or of environmental degradation, and a correction using the required design standards cannot be implemented in time to forestall that threat; or (b) the existence of extraordinary site conditions. If a design standard other than that specified in paragraph 9 is used, in addition to providing the best feasible fish passage at the barrier site, the Defendants shall mitigate for the

impacts of deviating from the standards of this injunction so that the resulting correction plus any mitigation provides at least the same net benefit to the salmon resource as would have occurred had the correction applied the required standards.

11. The Defendants shall provide fish passage in accordance with the standards set out in this injunction within a reasonable period of time: (a) when any culvert corrected under the injunction remains a barrier culvert after attempted correction, or again becomes a barrier culvert following an initially successful correction, or (b) when any culvert is newly identified as a salmon barrier culvert after the initial completion of the List.

12. The Defendants shall monitor their implementation of the injunction, and evaluate whether their efforts to provide fish passage at their salmon barrier culverts are effective in meeting the standards of this injunction. The Defendants shall take reasonable steps to maintain their culverts in such a manner as to prevent development of fish barriers and to protect salmon habitat.

13. The Defendants shall provide the interested Tribes with sufficient notice of State barrier culvert inventory, identification of previously unidentified State barrier culverts, assessment, and potential or actual State barrier culvert correction activities to permit the Tribes to monitor and provide effective recommendations for compliance with the requirements of this injunction.

14. The Court shall retain continuing jurisdiction over this subproceeding for a sufficient

period to assure that the Defendants comply with the terms of this injunction.

Respectfully submitted this 29th day of January, 2010.

PLAINTIFF-INTERVENOR TRIBES

By: s/ JOHN C. SLEDD, WSBA # 19270
Attorney for the Hoh, Jamestown S'Klallam, Lower Elwha Klallam, Nisqually, Port Gamble S'Klallam, Sauk-Suiattle, Skokomish, Squaxin Island, Stillaguamish and Suquamish Tribes

By: s/ LAURA SAGOLLA, Admitted *Pro Hac Vice*
Attorney for the Hoh, Jamestown S'Klallam, Lower Elwha Klallam, Nisqually, Port Gamble S'Klallam, Sauk-Suiattle, Skokomish, Squaxin Island, Stillaguamish and Suquamish Tribes

By: s/ ALAN C. STAY, WSBA # 4569
Attorney for the Muckleshoot Indian Tribe

By: s/ MASON D. MORISSET, WSBA # 273
Attorney for The Tulalip Tribes

By: s/ DANIEL A. RAAS, WSBA # 4970
Attorney for the Lummi Nation

By: s/ HARRY L. JOHNSEN, WSBA # 4955
Attorney for the Lummi Nation

By: s/ THOMAS ZEILMAN, WSBA # 28470
Attorney for the Yakama Nation

By: s/ LAUREN P. RASMUSSEN, WSBA # 33256
Attorney for the Jamestown S'Klallam and Port Gamble S'Klallam Tribes

By: s/ ALIX FOSTER, WSBA # 4943
Attorney for the Swinomish Indian Tribal Community

By: s/ EDWARD WURTZ, WSBA # 24741
Attorney for the Nooksack Tribe

By: s/ BRIAN GRUBER, WSBA # 32210
Attorney for the Makah Tribe

By: s/ SAMUEL J. STILTNER, WSBA # 7765
Attorney for the Puyallup Tribe

By: s/ HAROLD CHESNIN, WSBA # 398
Attorney for the Upper Skagit Tribe

By: s/ O. YALE LEWIS III, WSBA # 33768
Attorney for the Quileute Tribe

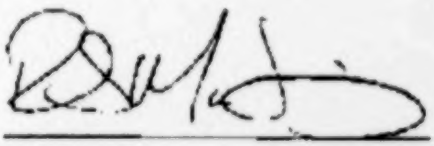
By: s/ ERIC J. NIELSEN, WSBA # 12773
Attorney for the Quinault Indian Nation

THE UNITED STATES OF AMERICA

By: s/ PETER C. MONSON
United States Department of Justice

ORDER

Is it is so ORDERED this 29th day of March 2013.



RICARDO S. MARTINEZ
UNITED STATES DISTRICT JUDGE

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHIGNTON, et al., Defendants.	No. CV 9213RSM Subproceeding No. 01-01 ORDER ON MOTIONS IN LIMINE

This matter is before the Court for consideration of the parties'[1] three motions in limine. Dkt. ## 572, 573, 574. The Court has fully considered the parties' memoranda and supporting exhibits. On October 7, 2009, at the pretrial conference in this matter, the Court made preliminary rulings on the motions in limine. This Order formalizes those rulings.

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[1]The parties to this subproceeding shall be designated as defendant "the State" (State of Washington), and plaintiffs "the Tribes" (Suquamish Indian Tribe, Jamestown S'Klallam, Lower Elwha Band of Klallam, Port Gamble Clallam, Nisqually Indian Tribe, Nooksack Tribe, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Upper Skagit Tribe, Tulalip Tribe, Lummi Indian Nation, Quinault Indian Nation, Puyallup Tribe, Hoh Tribe, Confederated Bands and Tribes of the Yakama Indian Nation, Quileute Indian Tribe, Makah Nation, Muckleshoot Indian Tribe, and Swinomish Tribal Community).

(1) Motion in Limine re: Martin Fox, PhD. (Dkt. # 572)

The State moves to exclude the testimony and opinion of Martin Fox, PhD., relating to his "field testing" of culverts. Dr. Fox, whom the State describes as a fisheries biologist with no experience designing culverts, selected 28 State (WSDOT) culvert sites (repaired culverts) for evaluation as to their efficacy in fish passage. The State contends that his opinions should be excluded as his report is not a peer-reviewed study and relies on no standard or published protocol. The State argues that under *Daubert*,[2] a study that was produced for the purposes of litigation is subject to especially strict scrutiny by the Court, as "gatekeeper". The State also contends that there is no distinction between bench and jury trials in the *Daubert* standards for admissibility of scientific evidence.

Where an expert is deemed qualified to testify, the approach taken in this Circuit (and the practice of this Court) for bench trials is to allow the testimony, and subject it to vigorous cross examination. The Tribes have produced a resume demonstrating that Dr. Fox is not only a fisheries biologist; he has an undergraduate degree in fisheries biology, but he has both a Masters' degree and Ph.D. in Forest Hydrology and Engineering. He is therefore highly qualified to

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[2]*Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).

testify on his evaluation of the culverts, even though his experience does not include culvert design.

This motion in limine (Dkt. # 572) is accordingly DENIED.

(2) Motion to Exclude Testimony on Fish Production Potential (Dkt. # 573)

In a second *Daubert* motion, the State argues that the Tribes' experts have improperly utilized two methodologies developed by State's scientists, namely the "PI" or Priority Index, and the "60 Day Low Flow" or "Zillges" method, to estimate the numbers of "lost" salmon that can be attributed to the State's blocked or partially-blocked culverts. Although the Court ruled in the Order Granting Summary Judgment on liability that the Tribes need not quantify the numbers of missing fish for that purppose [sic], they now seek to establish the numbers for the purpose of establishing their damages.

The Priority Index, or "PI" is a formula developed by the State to prioritize the replacement of culverts—that is, to determine which culverts will likely provide the maximum benefit in terms of fish production so those culverts can be replaced first. As set forth in the Declaration of Paul Sekulich, attached to the State's motion, the terms in the formula have the following definitions: PI is the sum, for all salmon species, of a figure determined by taking the quadratic root of the product of "BPH" times "MDC". Dr. Sekulich explains that the "MDC" terms are all modifiers which are relevant only to cost/benefit determinations. The relevant terms of the equation, and the ones taken by the Tribes for their fish production calculations, are the "BPH" factors. B is a

number which reflects the passage improvement achieved from a particular culvert correction project. It roughly reflects whether the culvert if a partial or total barrier to fish passage. P is [sic] the annual fish production potential per meter squared of habitat opened up if the culvert were to be repaired or replaced. Each salmon species has its own P number. H (for "habitat") reflects the number of square meters of habitat that would be opened up for smolting or spawning if a given culvert were repaired.

The State complains that the Tribe's data expert Tyson Waldo has improperly taken figures calculated by the State for the purpose of PI determination, and used them to predict values for the "lost" fish. It appears that what Mr. Waldo did was to take the P and H values used by the State for certain specified culverts, and multiply them together to arrive at a number that supposedly quantifies the fish production lost because of each culvert. The State contends that this is an improper use of the terms of the PI formulas.

The Tribes argue that Mr. Waldo simply used the State's own figures and methods, both of which have been in use for years to determine run size and are therefore well-established. This "production coefficient" method was used in 1997 by Dr. Sekulich to inform the Washington Legislature that "an additional 200,000 adult salmon would be produced annually" if 177 culverts were repaired. The Tribes argue that the BPH equation remains an integral part of the State's culvert analysis system. However, the PI was developed to determine relative benefit from fixing individual culverts, not absolute benefit in terms of individual streams. It is useful to determine

priorities, but the P x H equation is too speculative in terms of predicting potential fish production to be meaningful, as there are too many other factors affecting salmon populations that are not included in the calculation. For example, the P factor is determined individually for each species of salmon, and for the purposes of calculating PI the P factors for all salmon species are added together. In reality, the different species compete with one another for space, and the P factor does not take this inter-species competition into account. Using the P numbers calculated by the State in a simple P x H calculation would result in a predicted production number that is too high. Similarly, the H number does not take into account other factors which may reduce available habitat on the stream—such as the presence of other, non-DOT culverts, other habitat modifications, and many other environmental factors. In the absence of data on the number of salmon that actually arrive at a given culvert and whose passage is impeded, Mr. Waldo's calculations, and all further calculations based on Mr. Waldo's work, are too speculative to provide a meaningful measure of damages.

The motion in limine (Dkt. # 573) is accordingly GRANTED.

(3) Tribes' Motion to Exclude Testimony of David Smelser (Dkt. # 574)

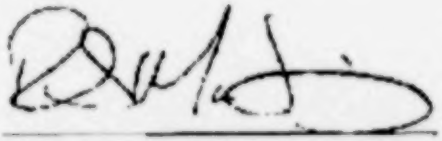
The Tribes ask to exclude the testimony of the State's "cost estimation" expert David Smelser. They contend that although the State originally identified Mr. Smelser as an expert in their case-in-chief, they withdrew that designation on April 2, 2009, reserving the right to identify him as a rebuttal witness in

accordance with an agreed Scheduling Order the parties developed. At Mr. Smelser's August 6, 2009 deposition, the Tribes learned that Mr. Smelser intended to offer much more than rebuttal testimony, despite having been withdrawn as a "case in chief" witness. The Tribes then withdrew their designation of Dr. Patricia Galloway as a witness in their case in chief, intending to rely on historical cost data only. They contend in this motion that Mr. Smelser cannot now testify as he was designated only as a rebuttal witness to Dr. Galloway's testimony.

The State argues that the distinction between rebuttal and primary witnesses is "hyper-technical," and that Mr. Smelser's testimony is "responsive" to the Tribe's cost estimates regardless whether Dr. Galloway testifies. However, once the State designated Mr. Smelser as a rebuttal witness only, that is the only function he can serve. If the Tribes have withdrawn Dr. Galloway as a primary witness and intend to rely only on historical cost data, that is the testimony which can be rebutted.

This motion is limine (Dkt. # 574) is accordingly GRANTED.

Dated this 8th day of October, 2009.



RICARDO S. MARTINEZ
UNITED STATES DISTRICT JUDGE

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHIGNTON, et al., Defendants.	Case No. CV 9213RSM Subproceeding No. 01-01 ORDER ON CROSS-MOTIONS FOR SUMMARY JUDGMENT

This matter was initiated by a Request for Determination ("Request") filed in 2001 by plaintiffs Suquamish Indian Tribe, Jamestown S'Klallam, Lower Elwha Band of Klallam, Port Gamble Clallam, Nisqually Indian Tribe, Nooksack Tribe, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Upper Skagit Tribe, Tulalip Tribe, Lummi Indian Nation, Quinault Indian Nation, Puyallup Tribe, Hoh Tribe, Confederated Bands and Tribes of the Yakama Indian Nation, Quileute Indian Tribe, Makah Nation, and Swinomish Tribal Community (hereafter, "the Tribes"). It is now before the Court for consideration of cross-motions for summary judgment filed by defendant State of Washington ("State") and by the plaintiff Tribes.[1] Dkt. ## 287, 295. Oral argument was

[1]Plaintiff United States of America has substantially joined in the Tribes' opposition to the State's motion. Dkt. # 313.

heard on the motions on February 1, 2007. The parties were then referred to the Honorable J. Kelley Arnold, United Magistrate Judge, for a settlement conference. The Court was advised on May 10, 2007 that the mediation was unsuccessful, and the matter was ripe for issuance of a decision on the summary judgment motions. The matter is set for trial on September 24, 2007.

The memoranda, exhibits, and arguments of the parties have been fully considered by the Court, as has the prior case history. For the reasons set forth below, the Court shall grant the Tribes' motion for partial summary judgment, and shall deny the summary judgment motion filed by the State of Washington.

BACKGROUND

This is a designated subproceeding of *United States, et al., v. State of Washington, et al.*, C70-9213. The United States, in conjunction with the Tribes, initiated this sub-proceeding in early 2001, seeking to compel the State of Washington to repair or replace any culverts that are impeding salmon migration to or from the spawning grounds. The Request for Determination, filed pursuant to the permanent injunction in this case, maintains that the State has a treaty-based duty to preserve fish runs so that the Tribes can earn a "moderate living". The State's original Answer asserted cross- and counter- Requests for Determination, claiming injunctive and declaratory relief against the United States for placing a disproportionate burden of meeting the treaty-based duty (if any) on the State. The State also asserted that the United States has managed its own

lands in such a way as to create a nuisance that unfairly burdens the State.

In 2001, the United States moved to dismiss the counterclaims, contending that it has not waived sovereign immunity with respect to these claims, and that the State lacks standing to assert tribal rights derived from the Treaties. The Court originally denied the motion to dismiss, but upon reconsideration the motion to dismiss the counterclaims was granted. The Court found that it lacked jurisdiction over the State's counterclaims because sovereign immunity has not been waived. A subsequent motion by the State for leave to file an amended Answer asserting counterclaims was denied. These cross-motions for summary judgment followed.

The parties have cooperated fully with one another throughout these proceedings, including discovery and settlement negotiations. They agree that material facts are not in dispute. Nevertheless, they have been unable to arrive at a settlement, and now ask the Court to resolve the legal issues presented.

DISCUSSION

This subproceeding arises from the language in Article III of the 1855 Treaty of Point Elliot ("Stevens Treaties") in which the Tribes were promised that "[t]he right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory . . . " Dkt. # 287-2. The Tribes, in their Request for Determination, state that they brought this action

> to enforce a duty upon the State of Washington to refrain from constructing and maintaining culverts under State roads that degrade fish habitat so that adult fish production is reduced, which in turn reduces the number of fish available for harvest by the Tribes. In part due to the reduction of harvestable fish caused by those actions of the State, the ability of the Tribes to achieve a moderate living from their Treaty fisheries has been impaired.

Request for Determination, Dkt. # 1, p. 1. .

The Tribes requested mandatory relief "requiring Washington to identify and then to open culverts under state roads and highways that obstruct fish passage, for fish runs returning to or passing through the usual and accustomed grounds and stations of the plaintiff tribes."[2] *Id.* Specifically, they request a declaratory judgment, establishing that (1) the right of taking fish secured by the Treaties imposes a duty upon the State of Washington to refrain from diminishing the number of fish passing through, or to or from, the Tribes' usual and accustomed fishing grounds by improperly constructing or maintaining culverts under State-owned roads and highways; and that (2) the State has

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[2]According to testimony and exhibits provided by the Tribes, culverts may become impassable to fish either because they are blocked by silt or debris, or because they are "perched"—that is, the outfall of the culvert is several feet or more above the level of the stream into which it flows. Salmon migrating upstream to spawn are stopped by a perched culvert and cannot reach their spawning grounds.

violated, and continues to violate, the duty owed the Tribes under the Stevens Treaties. Further, the Tribes request a prohibitory injunction, prohibiting the State of Washington and its agencies from constructing or maintaining any culverts that reduce the number of fish that would otherwise return to or pass through the usual and accustomed fishing grounds of the Tribes. Finally, they request a mandatory injunction, requiring the State to (1) identify, within eighteen months, the location of all culverts constructed or maintained by State agencies, that diminish the number of fish in the manner set forth above, and (2) fix, within five years after judgment, and thereafter maintain all culverts built or maintained by any State agency, so that they do not diminish the number of fish as set forth above. *Id.*, pp. 6-7.

The State has moved for summary judgment as to all aspects of the Request. The Tribes have moved for partial summary judgment as to the declaratory judgment portion of their Request. Shortly before the February 1, 2007 hearing, the parties stipulated to define the scope of this subproceeding to include "only those culverts that block fish passage under State-owned roads." Dkt. # 341. Therefore, culverts that do not actually block fish passage, as well as tidegates, are not within the scope of this subproceeding. *Id.*

The Tribes, in their Request, assert that between 1974, the year that this case was originally decided, and 1986, Tribal harvests of anadramous [sic] fish (salmon and steelhead) rose dramatically, eventually reaching some 5 million fish. Then harvests declined, so that by 1999 harvests were back

down to the 1974 levels.[3] The Tribes contend that "[a] significant reason for the decline of harvestable fish has been the destruction and modification of habitat needed for their survival." Request for Determination, Dkt. # 1, ¶¶ 2.5, 2.6, 2.7.

The Request addresses one specific type of habitat modification: the placement of culverts rather than bridges where roadways cross rivers and streams. The Tribes allege that when such culverts are improperly built or maintained, they block fish passage up or down the stream, "thereby preventing out-migration of juvenile fish to rearing areas or the salt water, or the return of adult fish to spawning

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[3]These figures are supported by the Declaration of Keith Lutz, a fisheries biologist with the Northwest Indian Fisheries Commission, filed in support of the Tribes' motion for partial summary judgment. The table presented by Mr. Lutz indicates that harvest levels in 1974 and 1975 were 860,537 and 1,001,041 fish respectively. The number of fish harvested rose steadily to 5,494,973 in 1985. Numbers of fish harvested then fluctuated between approximately three and four million fish for the next several years, higher in the odd-numbered years when large numbers of pink salmon were harvested. After 1991, harvests of four million fish were not seen again, and after the 1993 harvest of 3,497,537 fish the numbers declined dramatically, dipping as low as 575,958 in 1999. While post-1999 harvest numbers have risen somewhat, to 2,148,802 fish taken in 2003, the Tribal harvest through 2004 (the last year reported in this exhibit) remained less than half that of the years 1985 to 1991. Declaration of Kieth [sic] Lutz, Dkt. # 299.

beds, or both." *Id.*, ¶ 3.1. According to the Tribes, culverts under State-owned or maintained roads block fish access to at least 249 linear miles of stream, thus closing off more than 400,000 square meters of productive spawning habitat, and more than 1.5 million square meters of productive rearing habitat for juvenile fish. *Id.*, ¶ 3.7. The Tribes state that, by the State's own estimates, removal of the obstacles presented by blocked culverts would result in an annual increase in production of 200,000 fish, many of which would be available for Tribal harvest. *Id.*, ¶ 3.8.

The State does not dispute the fact that a certain number of culverts under State-owned roads present barriers to fish migration. The State notes that 18% of the culverts on land managed by the Department of Natural Resources ("DNR") were identified as barriers in a 2000 inventory. Washington State Parks ("WDP") have identified 120 culverts as fish passage barriers. And of the thousands of culverts passing under roads maintained by the Washington State Department of Transportation ("WSDOT"), the State asserts that "most", but not all, allow free passage of migrating fish—meaning that many do not.[4] Motion for Summary Judgment, pp. 8-11.

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[4]Although the State's motion did not set the number, an expert declaration filed in support of the Tribe's motion found 1,113 barrier culverts in the combined jurisdiction of the WSDOT and the Washington Department of Fish and Wildlife ("WDFW"), in addition to those included in the WDP

The State argues that the Tribes have produced no evidence that the blocked culverts "affirmatively diminish[] the number of fish available for harvest". State's Reply, Dkt. # 319, p. 2. The Tribes have, however, produced evidence of greatly diminished fish runs. While there may be other contributing causes for this, the conclusion is inescapable that if culverts block fish passage so that they cannot swim upstream to spawn, or downstream to reach the ocean, those blocked culverts are responsible for some portion of the diminishment. It is not necessary for the Tribes to exactly quantify the numbers of "missing" fish to proceed in this matter.

The issue then becomes a purely legal one: whether the Tribes' treaty-based right of taking fish imposes upon the State a duty to refrain from diminishing fish runs by constructing or maintaining culverts that block fish passage. The State asserts that this question has already been answered, and the Tribes' position rejected, by the Ninth Circuit Court of Appeals. However, that is not a correct characterization of the appellate court's prior rulings in this matter.

In 1976, after the Tribes won recognition of their treaty-based right to a fair and equitable share of harvestable fish in Phase I of this case, this Court turned to address environmental issues raised earlier. One of two questions addressed by the Court in Phase II was "whether the right of taking fish incorporates the right to have treaty fish protected from

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and DNR culvert counts. Declaration of Ronald McFarlane, Dkt. # 300, ¶ 8.

environmental degradation." *United States v. Washington*, 506 F. Supp. 187, 190 (1980). The district court held that "implicitly incorporated in the treaties' fishing clause is the right to have the fishery habitat protected from man-made despoliation [sic]." *Id.*, at 203. The Court then assigned to the State a burden "to demonstrate that any environmental degradation of the fish habitat proximately caused by the State's actions (including the authorization of third parties' activities) will not impair the tribes' ability to satisfy their moderate living needs." *Id.* at 207.

The Ninth Circuit Court of Appeals reversed this portion of the district court's order, but not as conclusively as the State suggests.

> Let us repeat the essence of our interpretation of the treaty. Although we reject the environmental servitude created by the district court, we do not hold that the State of Washington and the Indians have no obligations to respect the other's rights in the resource Instead, . . . we find on the environmental issue that the State and the Tribes must each take reasonable steps commensurate with the resources and abilities of each to preserve and enhance the fishery when their projects threaten then-existing levels.

United States v. Washington, 694 F.2d 1374, 1389 (9th Cir. 1982).

Upon request for rehearing *en banc*, the three-judge panel's opinion was vacated. *United States v. Washington*, 759 F.2d 1353, 1354 (9th Cir. 1985). A highly divided eleven-member court issued a *per*

curiam decision vacating the district court's declaratory judgment on the environmental issue. The court's order did not contain broad and conclusive language necessary to reject the idea of a treaty-based duty in theory as well as in practice. Instead, the Court found that the declaratory judgment on environmental issues was imprecise and lacking in a sufficient factual basis.

> We choose to rest our decision in this case on the proposition that issuance of the declaratory judgment on the environmental issue is contrary to the exercise of sound judicial discretion. The legal standards that will govern the State's precise obligations and duties under the treaty with respect to the myriad State actions that may affect the environment of the treaty area will depend for their definition and articulation upon *concrete facts which underlie a dispute in a particular case*. Legal rules of general applicability are announced when their consequences are known and understood in the case before the court, not when the subject parties and the court giving judgment are left to guess at their meaning. It serves neither the needs of the parties, nor the jurisprudence of the court, nor the interests of the public for the judiciary to employ the declaratory judgment procedure to announce legal rules imprecise in definition and uncertain in dimension. Precise resolution, not general admonition, is the function of declaratory relief. These necessary predicates for a declaratory judgment have not been met with respect to the environmental issues in this case.

> The State of Washington is bound by the treaty. If the State acts for the primary purpose or object of affecting or regulating the fish supply or catch in noncompliance with the treaty as interpreted by past decisions, it will be subject to immediate correction and remedial action by the courts. In other instances, *the measure of the State's obligation will depend for its precise legal formulation on all of the facts presented by a particular dispute.*

Id. at 1357 (emphasis added).

The appellate court's ruling, then, cannot be read as rejecting the concept of a treaty-based duty to avoid specific actions which impair the salmon runs. The court did not find fault with the district court's analysis on treaty-based obligations, but rather vacated the declaratory judgment as too broad, and lacking a factual basis at that time.[5] The court's

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[5] Neither the majority opinion, nor any of the dissenting or concurring opinions rejected the district court's analysis on treaty-based obligations. Indeed, three of the dissenting judges would have affirmed the district court's declaratory judgment on environmental issues. Judge Nelson flatly stated, "I agree with the district court that the Tribes have an implicit treaty right to a sufficient quantity of fish to provide them with a moderate living, *and the related right not to have the fishery habitat degraded to the extent that the minimum standard cannot be met. I also agree that the State has a correlative duty to*

language, however, clearly presumes some obligation on the part of the State; not a broad "general admonition" as originally imposed by the district court, but a duty which could be defined by concrete facts presented in a particular dispute. This dispute, limited as it is to "only those culverts that block fish passage under State-owned roads", is capable of resolution through the declaratory relief requested by the tribes. The Tribes have presented sufficient facts, in the form of fish harvest data and numbers of blocked culverts, to meet the appellate court's stated requirements for issuance of a declaratory judgment. A narrowly-crafted declaratory judgment such as the one requested here does not raise the specter of a broad "environmental servitude" so feared by the State.

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refrain from degrading or authorizing others to degrade the fish habitat in such a manner." *Id.* at 1367 (emphasis added). Judge Skopil joined in this dissent. *Id.* Judge Norris dissented "for the reasons articulated in Judge Nelson's dissenting opinion." *Id.* at 1368. Judges Sneed and Anderson, who sat on the original three-judge panel and formulated the "reasonable steps" standard set forth above, concurred in the opinion in the interests of collegiality, but did not retreat from the position they took in hearing the case originally. *Id.* at 1360. Judges who concurred in the opinion did so because of the absence or [sic] a case or controversy (Judges Ferguson and Schroeder), or because the declaratory judgment was deemed not an appealable decision (Judge Sneed). And nowhere in the majority opinion did the court state that no duty arises from the treaties.

In moving for summary judgment, the State also asserts that "[n]o treaty language supports 'moderate living' as the measure of any servitude". Motion for Summary Judgment, p. 16. The State argues that the Tribes have proposed that the State has a duty to avoid impairing their ability to earn a "moderate living", but no tribal member can define the term "moderate living". The State further asserts that the term "moderate living" does not appear in the treaty, and that since the treaty is a contract, its provisions must be definite in order to be enforceable. According to the State, "the term is inherently ambiguous." Motion for Summary Judgment, p. 17.

The term "moderate living" was coined by the courts, not the parties. It is thus indeed not a part of the treaty "contract"; it is an interpretation that has been applied by the courts. In *State of Washington, et al., v. Washington State Commercial Passenger Fishing Vessel Association, et al.*, 443 U.S. 658 (1979), the Supreme Court stated,

> We also agree with the Government that an equitable measure of the common right should initially divide the harvestable portion of each run that passes through a "usual and accustomed" place into approximately equal treaty and nontreaty shares, and should then reduce the treaty share if tribal needs may be satisfied by a lesser amount. . . .
>
> The division arrived at by the District Court is also consistent with our earlier decisions

> concerning Indian treaty rights to scarce natural resources. In those cases, after determining that at the time of the treaties the resource involved was necessary to the Indians' welfare, the Court typically ordered a trial judge or special master, in his discretion, to devise some apportionment that assured that the Indians' reasonable livelihood needs would be met. *Arizona v. California*, 373 U.S. at 600. . . .
>
> Thus, [the district court] first concluded that at the time the treaties were signed, the Indians, who comprised three-fourths of the territorial population, depended heavily on anadromous fish as a source of food, commerce, and cultural cohesion. Indeed, it found that the non-Indian population depended on Indians to catch the fish that the former consumed. Only then did it determine that the Indians' present-day subsistence and commercial needs should be met, subject, or [sic] course, to the 50% ceiling.
>
> . . . . As in *Arizona v. California* and its predecessor cases, the central principal here must be that Indian treaty rights to a natural resource that once was thoroughly and exclusively exploited by the Indians *secures so much as, but no more than, is necessary to provide the Indians with a livelihood—that is to say, a moderate living*.

Id. at 686 (citations omitted) (emphasis added).

The State's argument that the term "moderate living" is ambiguous and unenforceable in contract terms is thus without merit. It is neither a "missing

term" in the contract, nor a meaningless provision; it is a measure created by the Court. To the extent that it needs definition, it would be for the Court, not the Tribes, to define it. No party has yet asked that the Court do so, and the Court finds it unnecessary at this time. The Tribes' showing that fish harvests have been substantially diminished, together with the logical inference that a significant portion of this diminishment is due to the blocked culverts which cut off access to spawning grounds and rearing areas, is sufficient to support a declaration regarding the culverts' impairment of treaty rights.

In finding a duty on the part of the State to refrain from blocking fish access to spawning grounds and rearing habitat, the Court has been guided by well-established principles of treaty construction. These were set forth as they applied to the treaties at issue here by the Supreme Court in *State of Washington v. Washington State Commercial Passenger Fishing Vessel Association*.

> [I]t is the intention of the parties, and not solely that of the superior side, that must control any attempt to interpret the treaties. When Indians are involved, this Court has long given special meaning to this rule. It has held that the United States, as the party with the presumptively superior negotiating skills and superior knowledge of the language in which the treaty is recorded, has a responsibility to avoid taking advantage of the other side. "[T]he treaty must therefore be construed, not according to the technical meaning of its words to learned lawyers, but in the sense in which they would naturally be understood by the

Indians." This rule, in fact, has thrice been explicitly relied on by the Court in broadly interpreting these very treaties in the Indians' favor.

Governor Stevens and his associates were well aware of the "sense" in which the Indians were likely to view assurances regarding their fishing rights. During the negotiations, the vital importance of the fish to the Indians was repeatedly emphasized by both sides, and **the Governor's promises that the treaties would protect that source of food and commerce were crucial in obtaining the Indians' assent.** It is absolutely clear, as Governor Stevens himself said, that neither he nor the Indians intended that the latter "should be excluded from their ancient fisheries", *see* n. 9, *supra*, and it is accordingly inconceivable that either party deliberately agreed to authorize future settlers to crowd the Indians out of any meaningful use of their accustomed places to fish. That each individual Indian would share an "equal opportunity" with thousands of newly arrived individual settlers is totally foreign to the spirit of the negotiations. Such a "right", along with the $207,500 paid the Indians, would hardly have been sufficient to compensate them for the millions of acres they ceded to the Territory. Moreover, in light of the far superior numbers, capital resources, and technology of the non-Indians, the concept of the Indians' "equal *opportunity*" to take advantage of a scarce resource is likely in practice to mean that the

> Indians' "right of taking fish" will net them virtually no catch at all. . . .

Id. at 675-677 (citations omitted; emphasis in bold added, emphasis in italics in original).

After rejecting the State's "equal opportunity" theory, the Court went on to discuss the meaning of "in common with" as used in the treaties.

> But we think greater importance should be given to the Indians' likely understanding of the other words in the treaties and especially the reference to the "right of *taking* fish"—a right that had no special meaning at common law but that must have had obvious significance to the tribes relinquishing a portion of their pre-existing rights to the United States in return for this promise. This language is particularly meaningful in the context of anadromous fisheries—which were not the focus of the common law—because of the relative predictability of the "harvest". In this context, it makes sense to say that a party has a right to "take"—rather than merely the "opportunity" to try to catch—some of the large quantities of fish that will almost certainly be available at a given time.
>
> . . . .
>
> This interpretation is confirmed by additional language in the treaties. The fishing clause speaks of "securing" certain fishing rights, a term the Court has previously interpreted as synonymous with "reserving" rights previously exercised. Because the Indians had always

> exercised the right to meet their subsistence and commercial needs by taking fish from treaty area waters, they would be unlikely to perceive a "reservation" of that right as merely the chance, shared with millions of other citizens, occasionally to dip their nets in to the territorial waters.

Id. at 678-680 (citations omitted; emphasis in italics in original).

It was thus the right to *take* fish, not just the right to fish, that was secured by the treaties. The significance of this right to the Tribes, its function as an incentive for the Indians to sign the treaties, and the Tribes' reliance on the unchanging nature of that right, have been set forth in expert declarations provided by the Tribes. Historian Richard White, Ph.D., who has researched the history of the Stevens Treaties, including the intentions, expectations, and understandings of the negotiators on both sides, states that

> [o]ne vital part of the relations that Stevens sought to perpetuate was Indian fishing, both for subsistence and for trade. Stevens and the other treaty negotiators knew well that Puget Sound Indians relied heavily on their fisheries. . . .
>
> . . . .
>
> The Indians themselves expressed the importance of fishing to their way of life, and Stevens and the other negotiators assured them of their continued access to the fisheries. Treaty minutes record that at Point-No-Point,

One-lun-teh-tat, an "Old Sko-komish Indian" worried how they were to feed themselves once they ceded so much land to the whites, while Hool-hole-tan-akim also wanted to retain half the land. "Why," he asked, "should we sell? We may become destitute. Why not let us live together with you?" In the face of such objections, Benjamin F. Shaw, the interpreter, reassured the Indians that they were "not called upon to give up their old modes of living as places of seeking food, but only to confine their houses to one spot." And Michael Simmons, the special Indian agent for Puget Sound, explained that if they retained a large amount of land they would be confined to it, but that "when a small tract alone was left, the privilege was given of going wherever they pleased to fish and work for the whites." In negotiations at Neah Bay, the Makah raised questions about the role that the fisheries were to play in their future. Stevens replied that "far from wishing to stop their fisheries, he intended to send them oil, kettles and fishing apparatus." What Stevens and his negotiators explicitly promised in response to Indian objections was access to the usual places for procuring food and continued economic exchange with the whites.

. . . .

Stevens also sought to preserve Indian fishing rights to reduce the cost of implementing the treaties. In his instructions to Stevens, Mix had emphasized that whatever the form of the treaties, they should incur minimal expenses

> for the government. . . . As the Treaty Commissioners noted in their meeting of December 26, 1854, "it was necessary to allow them to fish at all accustomed places" because this "was necessary for the Indians to obtain subsistence." And securing the Indians a subsistence was critical if Stevens was to follow his very clear instructions to keep the cost of the treaty down. By guaranteeing the Indians a right to their share of the bounty of the land, rivers, and Sound, the treaties would enable them to feed themselves at little cost to the government.

Declaration of Richard White, Dkt. # 296, ¶¶ 8, 9, 11.

It was thus the government's intent, and the Tribes' understanding, that they would be able to meet their own subsistence needs forever, and not become a burden on the treasury.

> Stevens and the other negotiators believed that the abundant fisheries they had observed in Puget Sound would continue unabated forever. Early white accounts of these fisheries breathlessly reported that they were inexhaustible. . . . It was not until the 1890's that scientists began to caution that salmon and other stocks might not remain abundant forever.
>
> Stevens and the other negotiators anticipated that Indians would continue to fish the inexhaustible stocks in the future, just as they had in the past. Stevens specifically assured the Indians that they would have access to their normal food supplies now and in the future. At

> the Point Elliot Treaty, Stevens began by speaking of subsistence. "[A]s for food, you yourselves now, as in time past, can take care of yourselves." The question, however, was not whether they could now feed themselves, but rather whether in the future after the huge cessions that the treaties proposed the Indians would still be able to feed themselves. Stevens assured them that he intended that the treaty guarantee them that they could. *"I want that you shall not have simply food and drink now but that you may have them forever."* The negotiators uniformly agreed on the abundance of the fisheries, the dependence of the Indians upon them, their commercial possibilities, and their future "inexhaustibility." Stevens and Gibbs could both foresee and promote the commercial development of the territory, the creation of a commercial fishery by whites, and the continuation of an Indian fishery. They did not see any contradiction between them.

Id. at ¶¶ 13, 14 (emphasis added).

Thus, the Tribes were persuaded to cede huge tracts of land—described by the Supreme Court as "millions of acres"---by the promise that they would forever have access to this resource, which was thought to be inexhaustible. It was not deemed necessary to write any protection for the resource into the treaty because nothing in any of the parties' experience gave them reason to believe that would be necessary. According to historian Joseph E. Taylor II, Ph.D.,

> [d]uring 1854-1855, white settlement had not yet damaged Puget Sound fisheries. During those years, Indians continued to harvest fish for subsistence and trade as they had in the past. Given the slow pace of white settlement and its limited and localized environmental impact, Indians had no reason to believe during the period of treaty negotiations that white settlers would interfere, either directly through their own harvest or indirectly through their environmental impacts, with Indian fisheries in the future. During treaty negotiations, Indians, like whites, assumed that their cherished fisheries would remain robust forever.

Declaration of Joseph Taylor III, Dkt. # 297, ¶ 7.

As Professor White stated, the representatives of the Tribes were personally assured during the negotiations that they could safely give up vast quantities of land and yet be certain that their right to take fish was secure. These assurances would only be meaningful if they carried the implied promise that neither the negotiators nor their successors would take actions that would significantly degrade the resource. Such resource-degrading activities as the building of stream-blocking culverts could not have been anticipated by the Tribes, who themselves had cultural practices that mitigated negative impacts of their fishing on the salmon stocks. Declaration of Robert Thomas Boyd, Dkt. # 298, ¶ 6.

In light of these affirmative assurances given the Tribes as an inducement to sign the Treaties,

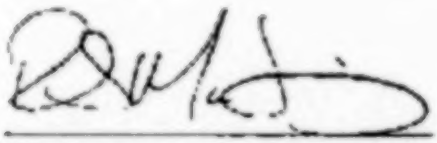
together with the Tribes' understanding of the reach of those assurances, as set forth by the Supreme Court in the language quoted above, this Court finds that the Treaties do impose a duty upon the State to refrain from building or maintaining culverts in such a manner as to block the passage of fish upstream or down, to or from the Tribes' usual and accustomed fishing places. This is not a broad "environmental servitude" or the imposition of an affirmative duty to take all possible steps to protect fish runs as the State protests, but rather a narrow directive to refrain from impeding fish runs in one specific manner. The Tribes have presented sufficient facts regarding the number of blocked culverts to justify a declaratory judgment regarding the State's duty to refrain from such activity. This duty arises directly from the right of taking fish that was assured to the Tribes in the Treaties, and is necessary to fulfill the promises made to the Tribes regarding the extent of that right.

CONCLUSION

Accordingly, the State's motion for summary judgment is DENIED. The Tribes' cross-motion for partial summary judgment is GRANTED. The Court hereby declares that the right of taking fish, secured to the Tribes in the Stevens Treaties, imposes a duty upon the State to refrain from building or operating culverts under State-maintained roads that hinder fish passage and thereby diminish the number of fish that would otherwise be available for Tribal harvest. The Court further declares that the State of Washington currently owns and operates culverts that violate this duty.

This matter is currently set for trial on September 24, 2007. In light of this ruling, a full trial on the merits is no longer necessary. However, further proceedings are needed to determine an appropriate remedy in this matter, so the September 24 date shall remain on the calendar for such proceedings. Counsel shall appear for a status conference on Wednesday, August 29, 2007 at 1:30 p.m. to discuss further proceedings.

Dated this 22 day of August 2007.



RICARDO S. MARTINEZ
UNITED STATES DISTRICT JUDGE

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHIGNTON, et al., Defendants.	No. C70-9213 Subproceeding No. 01-1 (Culverts) ORDER GRANTING UNITED STATES' AND DENYING WASHINGTON'S MOTIONS FOR JUDGMENT

THIS MATTER comes before the court on two related motions. The United States has filed a motion to strike, or for judgment on, fifteen of the twenty affirmative defenses asserted in the State of Washington's Answer to the Plaintiff Tribes' Request for Determination ("RFD") and to the United States' Response to the RFD. Washington has also filed what is essentially a cross-motion, seeking judgment on the pleadings regarding the "law of the case" in which it contends that the relief sought in the Tribes' RFD is barred by prior judicial decisions.[1] Having now reviewed the pleadings filed in support of and in opposition to these motions, together with the relevant portions of the record, and being fully advised, the court finds and rules as follows:

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[1] Washington's motion for judgment re: law of the case separately seeks judgment as a matter of law on this affirmative defense, which is also embraced by the United States' motion to strike.

I. DISCUSSION

A. Washington's Affirmative Defenses

1. Waiver and Estoppel

The affirmative defenses laid out in paragraphs 6.1 through 6.8 of Washington's answer are based on the doctrines of waiver or estoppel. Washington believes that the United States' conduct in funding and approving Washington's roadway culverts prevents it from now asserting a claim that those culverts violate the plaintiff Tribes' treaty rights. The United States argues that neither waiver nor estoppel are tenable defenses when the United States is acting to enforce the rights of Indian tribes.

The United States has correctly identified the binding authority that forecloses Washington's attempt to use waiver or estoppel defenses in this case. *See, e.g., Cramer v. United States*, 261 U.S. 219 (1923) (acts of government agent do not bind government and cannot constitute waiver of Indian rights); *Pine River Logging & Improvement Co. v. United States*, 186 U.S. 279 (1902) (same); *United States v . Washington*, 157 F. 3d 630 (9th Cir. 1998) (estoppel defense cannot be asserted to defeat claims enforcing Indian rights); *Swim v . Bergland*, 696 F.2d 712 (9th Cir. 1983) (same); *United States v. Ahtanum Irrigation Dist.*, 236 F.2d 321 (9th Cir. 1956) (same). Washington has not presented any on-point authority to the contrary, and its argument in opposition to the United States' motion fails to controvert the clear

legal principles laid out in the cases cited above. Because the defenses of waiver and estoppel are simply not available to defeat the United States' instant action to enforce the plaintiff Tribes' treaty rights, the government is entitled to judgment as a matter of law on the affirmative defenses asserted in paragraphs 6.1 through 6.8 of Washington's answer.

2. Constitutional Defenses

The United States argues that Washington's constitutional defenses, asserted under the Equal Footing Clause, the Guarantee Clause, and the Tenth Amendment to the United States Constitution, are legally insufficient under the instant circumstances. Washington responds that the treaty right asserted in this case may not be consistent with its admission as a state into the federal union, that it may violate the Guarantee Clause's promise of a republican government, and that it impinges on rights reserved to the states under the Tenth Amendment. Washington further argues that these defenses present questions that deserve further development and attention during this litigation and which preclude summary dismissal.

The court disagrees. As Washington admits, the Equal Footing doctrine has been rejected as a basis for limiting Indian tribes' treaty fishing rights for a century or more. *E.g. United States v. Winans*, 198 U.S. 371 (1905). Indeed, these very parties were reminded that Washington's admission "into the Union upon an equal footing with the original states had no effect upon the treaty rights of the Plaintiff tribes." *United states v. Washington*, 157 F.3d 630, 646 (9th Cir. 1998) (quoting Final Decision No. 1, 384

F. Supp. 312, 401 (W.D. Wash. 1974)). Washington responds that the relief sought in this subproceeding is based not on express treaty rights, but instead on an implied right to habitat conservation, and is thus not subject to the rule last stated. However, that contention rests on a faulty and improper formulation of the plaintiff Tribes' claim. The Tribes and the United States have asked the court to declare that Washington has a duty to manage its culverts in a certain manner so as to guarantee or protect their treaty right to take fish. Whether such a duty exists, and the measure of any such duty, has yet to be determined. What is abundantly clear at this time, however, is that the Tribes are asserting a treaty right, and that right is unaffected by Washington's admission into the union, such that the Equal Footing affirmative defense (paragraph 6.12 of Washington's answer) must fail as a matter of law.

The same is true for Washington's Guarantee Clause defense (paragraph 6.17 of Washington's answer). Washington's claim that the Tribes seek to dictate how the state legislature shall act and to control the expenditure of state funds is simply unfounded and contrary to the plain language of the RFD. Moreover, to the extent that Washington will be forced to act in a particular manner in order to comply with its treaty obligations, that compelled action is no constitutional infringement given the fact that treaties with Indian tribes are expressly part of the "Supreme Law of Land" governing all states. *See* U.S. Const. Art. VI (containing the "Supremacy Clause"); *Missouri v. Holland*, 252 U.S. 416, 432 (1920). The Guarantee Clause is thus no bar to the relief sought in the plaintiffs' RFD.

Washington's defense under the Tenth Amendment (paragraph 6.18 of Washington's answer) can fare no better. The Amendment protects state sovereignty and the federalist structure of our national government, but Washington has nowhere identified any threat to its reserved powers. Again, by operation of the Supremacy Clause, Indian treaties are incorporated into the body of paramount law binding both state and federal governments. There can be no valid Tenth Amendment defense when the United States seeks to enforce an obligation under one of these universally binding legal positions. *Id. See also Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 204 (1999).

3. Political Question Doctrine

The United States correctly notes that Washington's political question affirmative defense, asserted in paragraph 6.13 of its answer, cannot be sustained where the case does not implicate the relationship between the coordinate branches of the federal government. *See Baker v. Carr*, 369 U.S. 186, 210 (1962) (holding that political question doctrine is implicated in "the relationship between the judiciary and the coordinate branches of the Federal Government, and not the federal judiciary's relationship to the States"). Apparently conceding this point, Washington argues that a political question is raised because the Tribes have presented claims for which no judicially determinable standards for decision exist. Washington relies primarily on the procedural history of the former "Phase II" of this litigation in support of this argument.

However, Washington overstates the significance of the prior holdings in Phase II. Although the Ninth Circuit Court of Appeals vacated this court's order with respect to the Tribes' right to prevent environmental degradation, it left open the possibility that such a right exists and left for future tribunals the question of how to measure that right. *See United States v. Washington*, 759 F.2d 1353, 1357 (9th Cir. 1985). There is simply no support in the record or case law for the proposition that this court is ill-equipped to determine the appropriate legal standards for deciding the issues presented herein. Under these circumstances, Washington's political question affirmative defense lacks any merit.

4. Self-execution of Treaties

Washington alleges in paragraph 6.14 of its answer that the Stevens treaties at issue in this case are not self-executing and thus not binding on the State absent Congressional ratification. This position has been repeatedly rejected, including by the Supreme Court in closely-related litigation. *See Washington v. Washington State Commercial Passenger Fishing Vessel Assn.*, 443 U.S. 658, 693 (1979). Nevertheless, Washington seeks to save this affirmative defense by claiming that the particular rights asserted in this subproceeding are only *implied by* self-executing rights, and are not themselves self-executing. Yet this argument is based on the flawed characterization of the Tribes' claims heretofore rejected by the court. *See supra*, § I.A.2. Because the Tribes are seeking to measure and enforce their right to take fish, which right is indisputably self-executing, *Passenger Fishing Vessel*, 443 U.S. at 693, this affirmative defense is legally unavailing.

5. Washington's Compliance With the Endangered Species Act

Washington describes its Endangered Species Act ("ESA") compliance affirmative defense as an assertion that "any alleged treaty habitat obligation affecting the State's construction and maintenance of culverts is subsumed by Washington's ESA compliance because the United States has expressly said so." Washington's Opposition to the United States' Motion to Strike at 15. It cites nothing in support of this proposition.

Moreover, Washington's position defies logic. Washington's compliance with the ESA in particular actions or projects does not necessarily satisfy its treaty obligations any more than satisfying its treaty obligations would suffice for compliance with the ESA. The duties imposed by each originate with different legal sources, and are measured by different legal standards. That being so, Washington's ESA affirmative defense essentially reduces to another variation on the waiver and estoppel argument, namely that it has complied with the Stevens treaties "because the United States said so," summarily rejected above. However it is framed, the court concludes that this affirmative defense, set forth in paragraph 6.15 of Washington's answer, cannot survive the United States' motion to strike.

B. Washington's Motion for Judgment on the Pleadings

Washington's Motion for Judgment on the Pleadings Re: Law of the Case seeks judgment as a matter of law that the relief requested by the plaintiff Tribes, and the United States on their behalf, in this

subproceeding is barred by the preclusive effect of prior legal determinations, and asks that the litigation be terminated on that basis. Specifically, Washington argues that the Tribes are not, as a matter of law, guaranteed a treaty right to "earn a moderate living" from their treaty fishery because numerous courts have already rejected that contention, citing *Washington Passenger Fishing Vessel*, 443 U.S. 658, and the *United States v. Washington* complex of cases. Both the Tribes and the United States have filed memoranda opposing this motion, in which they argue that Washington has mischaracterized the nature of the remedy they seek and has misread the holdings on which Washington's argument relies. The United States asks the court to strike this "law of the case" theory as an affirmative defense, which is set out in paragraph 6.11 of Washington's answer.

Having closely reviewed the applicable pleadings, the court rejects Washington's formulation of the relief plaintiffs seek in this matter. Washington's motion proceeds, at the outset, on a faulty premise by suggesting that the Tribes are suing to enforce their right to earn a moderate living. This mischaracterization oversimplifies the remedies sought in the Request for Determination, and unfairly casts it in terms that may facially conflict with prior judicial decisions. Instead, it is clear to the court that the plaintiffs are seeking to prevent the state from interfering with the treaty right of taking fish by affirmatively diminishing the number of fish available for harvest.

Furthermore, the court does not read the cases Washington relies on in the manner which

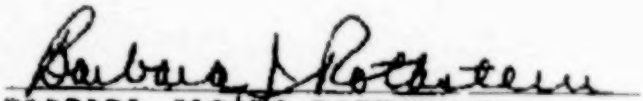
Washington suggests, and rejects the claim that those decisions preclude litigation of the Tribes' instant attempt to ensure that Washington does not build and manage its roadway culverts in a fashion that impermissibly blocks the passage of fish destined for the Tribes' usual and accustomed fishing grounds. For example, the Ninth Circuit Court of Appeals, in dismissing the Phase II litigation, explicitly recognized that the "state of Washington is bound by the treaty. If the State acts for the primary purpose or object of affecting or regulating the fish supply or catch in noncompliance with the treaty as interpreted by past decisions, it will be subject to immediate correction and remedial action by the courts. In other instances (when the state does not act with the primary purpose of regulating fish supply), the measure of the State's obligation (to avoid environmental degradation) will depend for its precise legal formulation on all of the facts presented by a particular dispute." *United States v. Washington*, *supra*, 759 F.2d at 1357. Nothing in the *Passenger Fishing Vessel* decision conflicts with this recognition that Washington's duty with respect to the environment, imposed by the treaty, is a realistic possibility.

Whether the Tribes have a treaty-based right to insist on the remedies they seek from the state remains to be determined. But nothing in prior decisions precludes this court from considering the issues raised in the RFD. Because the instant litigation is not controlled or foreclosed by prior rulings, Washington's law of the case affirmative defense fails as a matter of law.

II. CONCLUSION

For the reasons detailed above, the court finds that fifteen of Washington's affirmative defenses are insufficient as a matter of law. The United States' motion to strike, or in the alternative to grant judgment on, those affirmative defenses is GRANTED and the affirmative defenses are hereby STRICKEN from Washington's answer. The court also concludes that Washington's motion for judgment on the pleadings is without merit, and that motion is hereby DENIED.

Dated at Seattle, Washington this 5th day of September, 2001.



BARBARA JACOBS ROTHSTEIN
UNITED STATES DISTRICT JUDGE

No. 17-269

In the Supreme Court of the United States

STATE OF WASHINGTON, PETITIONER

v.

UNITED STATES OF AMERICA, ET AL.

ON PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

BRIEF FOR THE UNITED STATES IN OPPOSITION

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QUESTIONS PRESENTED

1. Whether the "right of taking fish, at all usual and accustomed grounds and stations * * * in common with all citizens," reserved by respondent Indian Tribes in the Stevens Treaties, *e.g.*, Treaty of Medicine Creek, U.S.-Nisqually, art. III, Dec. 26, 1854, 10 Stat. 1133, imposes a duty on petitioner to refrain from building or maintaining culverts that directly block passage of a large number of anadromous fish to and from those grounds and that significantly diminish fish populations available for tribal harvest so that the Tribes cannot sustain a livelihood from their fisheries.

2. Whether the court of appeals correctly declined to apply the doctrines of waiver or laches to bar this suit, which addresses a treaty reserving rights and resources that pre-date the State, the scope of which has been in dispute for more than 100 years.

3. Whether the court of appeals correctly held that the district court did not abuse its discretion in enjoining petitioner to provide fish passage by addressing barrier culverts on a reasonable schedule necessary to ensure that petitioner acts expeditiously to remedy a violation of tribal treaty rights.

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BRIEF FOR THE UNITED STATES IN OPPOSITION

OPINIONS BELOW

The amended opinion of the court of appeals (Pet. App. 58a-126a) is reported at 853 F.3d 946. The relevant opinions of the district court are reported at 20 F. Supp. 3d 828 (Pet. App. 249a-272a), 20 F. Supp. 3d 986 (Pet. App. 127a-179a, 235a-242a), and 19 F. Supp. 3d 1317 (Pet. App. 273a-282a). Additional opinions of the district court (Pet. App. 180a-234a, 243a-248a) are unreported.

JURISDICTION

The judgment of the court of appeals was entered on March 2, 2017. A petition for rehearing was denied on May 19, 2017 (Pet. App. 1a-57a). The petition for a writ of certiorari was filed on August 17, 2017. The jurisdiction of this Court is invoked under 28 U.S.C. 1254(1).

STATEMENT

1. In 1854 and 1855, in exchange for vast cessions of land in what is now the western part of the State of Washington, respondent Indian Tribes entered into treaties securing for themselves periodic monetary payments, smaller tracts of land set aside for their exclusive use, and the preservation of fishing rights in the ceded areas. Pet. App. 68a; *Washington* v. *Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 661-662 (1979) (*Fishing Vessel*). The treaties, known as the Stevens Treaties, were negotiated under the leadership of Governor Isaac Stevens of the Washington Territory. Pet. App. 68a; *Fishing Vessel*, 443 U.S. at 666.

From time immemorial, the Tribes have used and relied on fish for commercial, subsistence, and ceremonial purposes and have exercised that right at particular places. *Fishing Vessel*, 443 U.S. at 665-666; see *United States* v. *Winans*, 198 U.S. 371, 381 (1905) (fishing was "not much less necessary to the existence of the Indians than the atmosphere they breathed"). The United States treaty negotiators were well aware of "the vital importance of the fisheries" to the Tribes, and they understood that without preservation of the Indians' off-reservation right to take fish at particular sites, the Tribes would not have entered into the treaties, *Fishing Vessel*, 443 U.S. at 666-667, which reserved property rights in the Tribes that were "continuing against the United States and its grantees as well as against the State and its grantees." *Winans*, 198 U.S. at 381-382.

To preserve the Tribes' fishing right, the Stevens Treaties provide in essentially identical language: "The right of taking fish, at all usual and accustomed grounds

and stations, is further secured to said Indians, in common with all citizens of the Territory." Treaty of Medicine Creek, U.S.-Nisqually, art. III, Dec. 26, 1854, 10 Stat. 1133; see, *e.g.*, Pet. App. 68a; C.A. E.R. 44-45. The negotiators assured the Tribes that, under the treaties, they would have "continued access to their usual fisheries" and "would still be able to feed themselves and their families forever." Pet. App. 129a; see *Fishing Vessel*, 443 U.S. at 667 n.11 (Stevens assured the Indians that "'[t]his paper secures your fish'") (citation omitted). Both the United States and the Tribes viewed the protection of the Tribes' off-reservation fishing right as a critical element of the treaties. *Fishing Vessel*, 443 U.S. at 666-668.

2. As the availability of fish—in particular, salmon and other anadromous fish—has diminished, disputes have ensued between petitioner State of Washington and the Tribes over fishing rights. Pet. App. 7a; *Fishing Vessel*, 443 U.S. at 670.[1] In 1970, the United States, on its own behalf and as trustee for several of the Tribes, sued petitioner in federal district court. *Fishing Vessel*, 443 U.S. at 669-670. The United States sought declaratory and injunctive relief based on the fishing-rights clause of the Stevens Treaties. *Ibid.* The district court divided the case into two phases. Pet. App. 78a.

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[1] Before *Fishing Vessel* and the present dispute, this Court addressed the Tribes' treaty fishing right in *Winans*, 198 U.S. 371; *Seufert Bros. Co.* v. *United States*, 249 U.S. 194 (1919); *Tulee* v. *Washington*, 315 U.S. 681 (1942); *Puyallup Tribe* v. *Department of Game*, 391 U.S. 392 (1968); *Department of Game* v. *Puyallup Tribe*, 414 U.S. 44 (1973); and *Puyallup Tribe, Inc.* v. *Department of Game*, 433 U.S. 165 (1977).

a. In Phase I, the district court established the locations of the Tribes' "usual and accustomed" fishing grounds and held that the Tribes could take up to 50% of the harvestable fish from those grounds. *United States* v. *Washington*, 384 F. Supp. 312, 332-333, 343-344 (W.D. Wash. 1974), aff'd, 520 F.2d 676 (9th Cir. 1975), cert. denied, 423 U.S. 1086 (1976). The court issued a detailed injunction, *id.* at 413-420, and it reserved jurisdiction to hear unresolved issues arising out of the treaties, including those it had bifurcated for later determination, *id.* at 333.

The district court's ruling met substantial resistance from petitioner and spawned numerous suits that ultimately reached this Court in *Fishing Vessel*, where the district court's interpretation of the treaties and issuance of injunctive relief were affirmed. This Court rejected petitioner's argument that the treaties guaranteed the Tribes only an "'equal opportunity'" to harvest fish with non-Indians, 443 U.S. at 676-679 & n.22, and affirmed the Tribes' right to an equal share of the harvestable fish, *id.* at 685. Furthermore, the Court interpreted the fishing-rights clause as promising not only an equal share of the fish with non-Indians, but also protection for the Tribes' supply of fish. *Id.* at 676. "Because the Indians had always exercised the right to meet their subsistence and commercial needs by taking fish from treaty area waters," the Court explained, the Tribes "would be unlikely to perceive a 'reservation' of that right as merely the chance * * * to dip their nets" into the waters. *Id.* at 678-679. With respect to the equitable share of fish, this Court specified that 50% was the maximum allocation, but not a minimum because the treaty rights secured "so much as, but no more than, is

necessary to provide the Indians with a livelihood—that is to say, a moderate living." *Id.* at 686.

b. In 1976, the United States initiated Phase II of the litigation and requested a declaratory judgment clarifying whether the Tribes' treaty fishing right extends to hatchery fish and requires protection from significant environmental degradation of the fish habitat necessary for survival of fish populations. *United States* v. *Washington*, 506 F. Supp. 187, 194 (W.D. Wash. 1980), aff'd in part and vacated in part, 759 F.2d 1353 (9th Cir.) (per curiam), cert. denied, 474 U.S. 994 (1985). The district court held that the Tribes' fishing right extends to an equal share of hatchery fish. *Id.* at 195-202. The court further held that the Tribes' right imposes on petitioner a correlative duty "to refrain from degrading the fish habitat to an extent that would deprive the tribes of their moderate living needs." *Id.* at 208. The decision, however, did not address any particular habitat degradation or specify any remedy. *Ibid.*

The court of appeals affirmed in part and vacated in part. *United States* v. *Washington*, 759 F.2d 1353 (9th Cir.) (en banc) (per curiam), cert. denied, 474 U.S. 994 (1985). The court affirmed the Tribes' right to a share of hatchery fish. *Id.* at 1358-1360. The court vacated the declaratory judgment on the environmental issue, concluding that it was "contrary to the exercise of sound judicial discretion" to declare a sweeping right of habitat protection absent a concrete factual dispute. *Id.* at 1357-1358. Although the court did not dispute that petitioner has some obligations under the Stevens Treaties not to significantly reduce fish populations, it held that the legal standards that govern petitioner's precise duties "will depend for their definition and articulation

upon concrete facts which underlie a dispute in a particular case." *Ibid.*

3. This litigation presents those "concrete facts." The abundance of salmon and the areas open to tribal harvest have decreased substantially due to the loss of salmon habitat caused in significant part by the construction and maintenance of barrier culverts under state roads. Pet. App. 132a. For many years, the Tribes complained that petitioner had built roads across salmon-bearing streams, and culverts under those roads—referred to as "barrier culverts"—allowed passage of water, but not passage of salmon. *Id.* at 7a-8a, 77a-78a. Salmon are anadromous fish, meaning that they hatch in fresh water, migrate to the ocean to mature, and return to fresh water to spawn. *Id.* at 8a, 77a. Access to spawning grounds is therefore "essential to their reproduction and survival." *Id.* at 8a. Barrier culverts block approximately 1000 linear miles of streams comprising almost five million square meters of salmon habitat. *Id.* at 157a, 162a.

In 1997, the Washington Department of Fish & Wildlife (WDFW) and the Washington State Department of Transportation (WSDOT) reported that WSDOT culverts alone blocked an area of approximately 1.6 million square meters of fish habitat, which they estimated would produce 200,000 additional adult salmon each year. Pet. App. 109a. In 2001, the Tribes filed a request for determination seeking declaratory and injunctive relief against petitioner, based on WDFW's records and supporting evidence. C.A. E.R. 1008-1021. The Tribes, joined by the United States, sought to enforce a duty owed by petitioner to "refrain from diminishing, through the construction or maintenance of culverts under State owned roads and highways, the number of fish

that would otherwise return to or pass through the tribes' usual and accustomed fishing grounds and stations, to the extent that such diminishment would impair the tribes' ability to earn a moderate living from the fishery." *Id.* at 1013-1014.

Petitioner asserted defenses of waiver and estoppel to the claims of treaty violations. Pet. App. 274a. The district court rejected those defenses, concluding that the United States could not waive the treaty rights of Indians through the actions of federal officials that funded and purportedly approved the culverts. *Id.* at 274a-275a.

On summary judgment, the district court ruled in favor of the Tribes on the issue of treaty fishing rights. Pet. App. 249a-272a. The court concluded that the "right of taking fish, secured to the Tribes in the Stevens Treaties, imposes a duty upon [petitioner] to refrain from building or operating culverts under State-maintained roads that hinder fish passage and thereby diminish the number of fish that would otherwise be available for Tribal harvest," and that petitioner "currently owns and operates culverts that violate this duty." *Id.* at 271a.

In 2009 and 2010, the district court held a bench trial to determine the appropriate remedy. Pet. App. 128a. In 2013, the court issued a memorandum and decision, including nearly 200 findings of fact. *Id.* at 127a-179a. The court found that improperly designed culverts have resulted in the loss of spawning and rearing habitat, both by blocking passage of fish and by causing other negative effects on streams. *Id.* at 160a-161a. The court further found that correction of barrier culverts is a

cost-effective and scientifically sound method of restoring habitat that "provides immediate benefit in terms of salmon production." *Id.* at 166a.

The district court, based on WDFW records, found that at the time of trial, state-owned culverts blocked access to about 1000 miles of streams, constituting nearly five million square meters of habitat. *Id.* at 156a-157a, 162a. At the rate petitioner was addressing those barrier culverts, the court found, "it would take the State more than 100 years to replace the 'significantly blocking' WSDOT barrier culverts that existed in 2009." *Id.* at 162a-163a.

The district court also issued conclusions of law, including that:

- "Where culverts block passage of fish such that adult salmon cannot swim upstream to spawn and juveniles cannot swim downstream to reach the ocean, those blocked culverts are directly responsible for a demonstrable portion of the diminishment of the salmon runs." Pet. App. 175a.
- "The depletion of salmon stocks and the resulting diminished harvests have harmed the Tribes and the individual members economically, culturally, and personally," and the "Tribes have demonstrated * * * that they have suffered irreparable injury in that their Treaty-based right of taking fish has been impermissibly infringed." *Id.* at 175a-176a.
- "Despite past State action, a great many barrier culverts still exist, large stretches of potential salmon habitat remain empty of fish, and harvests are still diminished." *Id.* at 176a.

- "State action in the form of acceleration of barrier correction is necessary to remedy this decline in salmon stocks and remove the threats which face the Tribes," and petitioner "has the financial ability to accelerate the pace of barrier correction." *Id.* at 177a.
- "[I]t is in the public's interest * * * to accelerate the pace of barrier correction" because "[a]ll fishermen * * * will benefit from the increased production of salmon" and "[t]he general public will benefit from the enhancement of the resource and the increased economic return from fishing." *Id.* at 178a.

Based on those findings of fact and conclusions of law, the district court granted the permanent injunction requested by the Tribes and the United States. Pet. App. 179a, 235a-242a. The injunction ordered petitioner to prepare a list of culverts under state-owned roads that are salmon barriers, using a methodology adopted by the WDFW. *Id.* at 236a. Culverts maintained by state agencies other than the WSDOT were to be corrected by October 2016—the date by which those agencies were already expected to correct such culverts. *Id.* at 237a. The injunction ordered the WSDOT to correct many of its high-priority barrier culverts within 17 years, allowing deferral of some under certain conditions, and to correct the remainder at the end of the culverts' useful life or in connection with other highway projects. *Id.* at 237a-238a. The injunction further provided that petitioner can deviate from design standards if it can establish or the parties agree that the standards are not feasible in specific circumstances. *Id.* at 239a. Petitioner declined to participate in the formulation of

the injunction or to provide alternative proposals or time tables. *Id.* at 107a.

4. a. The court of appeals affirmed. Pet. App. 58a-126a. The court rejected petitioner's argument that it "has no treaty-based duty to refrain from building and maintaining barrier culverts," and, indeed, that it "has the right, consistent with the Stevens Treaties, to block every salmon-bearing stream feeding into Puget Sound." *Id.* at 86a-88a. The court explained that "[t]he Indians did not understand the Treaties to promise that they would have access to their usual and accustomed fishing places, but with a qualification that would allow [petitioner] to diminish or destroy the fish runs." *Id.* at 91a. The court concluded that Governor Stevens "did not make * * * such a cynical and disingenuous promise." *Id.* at 91a-92a. Accordingly, the court held that the Tribes' fishing right imposes a duty on petitioner to refrain from constructing and maintaining culverts under state roads that block or restrict passage of anadromous fish to and from traditional tribal fishing grounds. *Id.* at 94a-96a. In so ruling, the court explained that state culverts blocked at least 1000 miles of streams suitable for salmon habitat, and that if those culverts were modified to allow fish passage, several hundred thousand additional mature salmon would be produced every year, many of which would be available to the Tribes, whose members currently cannot obtain a moderate living from fishing. *Id.* at 95a.

The court of appeals also affirmed the district court's rejection of petitioner's equitable defenses against the United States to claims of treaty violations. Pet. App. 96a-99a. The court concluded that when the United States sues as a trustee for Indian tribes, it is not subject to equitable defenses of laches, waiver, or estoppel

based on the actions of its agents purportedly approving treaty violations. *Id.* at 97a-98a. Finally, the court rejected petitioner's arguments regarding injunctive relief. *Id.* at 104a-126a. The court concluded that there was sufficient evidence to show that state-owned barrier culverts have a substantial adverse effect on salmon, *id.* at 108a-116a, that the injunction was not an undue intrusion into state government affairs, *id.* at 121a-123a, and that the scope of the injunction was consistent both with general equitable principles and remedial principles that apply in the context of Indian treaties, *id.* at 120a-121a, 123a-125a.

b. Judge O'Scannlain, joined in full or in part by eight other judges, dissented from the denial of rehearing en banc. Pet. App. 17a-41a. In Judge O'Scannlain's view, the Stevens Treaties do not obligate petitioner to ensure that there are sufficient fish available to provide the Tribes with a moderate living. *Id.* at 21a-27a. Judge O'Scannlain further concluded that the panel opinion "could be used to challenge activities that affect wildlife habitat in other western states." *Id.* at 19a; see *id.* at 27a-32a. Judge O'Scannlain believed that the doctrine of laches should bar the United States' suit, *id.* at 32a-36a, and that the injunction was overbroad, *id.* at 36a-41a.

ARGUMENT

Petitioner does not challenge that barrier culverts impede fish passage, eliminating over 1000 miles of salmon habitat that, if accessible, would likely lead to increased fish populations. Instead, petitioner contends (i) that it did not violate the Tribes' treaty fishing right by building and maintaining road culverts that block or restrict the passage of anadromous fish to tribal fishing grounds (Pet. 18-25); (ii) that the court of appeals erred

in rejecting petitioner's equitable defenses against the United States (Pet. 25-28); (iii) and that the injunction entered by the district court violates federalism and comity principles by requiring petitioner to replace culverts without (petitioner asserts) any clear connection between culvert replacement and tribal fisheries (Pet. 28-34). The court of appeals correctly rejected those arguments, and its decision does not conflict with any decision of this Court or another court of appeals. Further review is therefore unwarranted.

1. In *Washington* v. *Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658 (1979), this Court held that the Stevens Treaties guarantee to the Tribes an equitable allocation of up to 50% of the harvestable fish in their usual and accustomed fishing areas. *Id.* at 685-686. That 50% share "imposes a maximum but not a minimum allocation." *Id.* at 686. That is so, the Court explained, because the Tribes' treaty fishing right "secures so much as, but no more than, is necessary to provide the Indians with a livelihood—that is to say, a moderate living." *Ibid.*; see *United States* v. *Winans*, 198 U.S. 371, 381-382 (1905).

a. Petitioner contends (Pet. 19-22) that the court of appeals' decision conflicts with *Fishing Vessel* by imposing an affirmative duty upon petitioner to provide a certain quantity of fish that would ensure a moderate living for the Tribes. Petitioner contends that the court's decision cannot be squared with this Court's holding in *Fishing Vessel* that the Tribes are entitled to no more than one-half of harvestable fish in their usual and accustomed fishing areas, even if that amount is less than the Tribes' "'needs dictated.'" Pet. 20-21 (quoting *Fishing Vessel*, 443 U.S. at 670). Petitioner's argument is misconceived.

As petitioner explains, the Tribes in *Fishing Vessel* had argued that the treaties reserved a right to "'as many fish as their commercial and subsistence needs dictated.'" Pet. 19 (quoting *Fishing Vessel*, 443 U.S. at 670). This Court rejected that argument and instead held that the Tribes' fishing right reserves "so much as, but not more than, is necessary" to provide the Indians with a moderate living, subject to a ceiling of 50% of the harvestable run. *Fishing Vessel*, 443 U.S. at 685-686. The court of appeals' decision follows from that central tenet of *Fishing Vessel*. As the court explained, "[i]t is undisputed that at the present time fifty percent of the harvestable salmon in Puget Sound does not provide a moderate living to the Tribes," and that petitioner has acted affirmatively to build roads with barrier culverts that impair the shared resource and "substantially diminish[] the supply of harvestable salmon." Pet. App. 10a. The court's conclusion that petitioner violates the treaty fishing right by interfering with the Tribes' ability to ensure a moderate living does not conflict with the Court's statement in *Fishing Vessel* that the Tribes' are entitled only to what is necessary to provide them with a moderate living, subject to the 50% ceiling, but not to "'as many fish as their commercial and subsistence needs dictated.'" Pet. 19 (quoting *Fishing Vessel*, 443 U.S. at 670).

Furthermore, the court of appeals explicitly stated that its opinion "does not hold that the Tribes are entitled to enough salmon to provide a moderate living, irrespective of the circumstances." Pet. App. 10a. The court acknowledged that the promise of a moderate living is not valid against "acts of God," "all human-caused diminutions, or even against all State-caused diminutions." *Ibid.* The court concluded only that, in this case

concerning only state-owned barrier culverts, petitioner violates the treaty fishing right when it acts "affirmatively to build roads across salmon bearing streams, with culverts that allowed passage of water but not passage of salmon." *Id.* at 10a-11a.

According to petitioner (Pet. 20-21), the "moderate living" standard is only an "equitable limit the State could invoke * * * as a ceiling on the tribal share of the catch, not a floor on fish harvests that the treaties always guaranteed." Under that view, it would thus be consistent with the treaties for petitioner to take actions that would "entirely eliminate the supply of harvestable salmon" so that the Tribes ends up with "fifty percent of nothing." Pet. App. 9a; see *id.* at 87a-88a. That contention is unsound. Reviewing the history of the treaties, relevant principles of treaty interpretation, and this Court's decisions in *Fishing Vessel* and other cases interpreting the treaty fishing right, the court of appeals determined that the Indians reasonably understood the treaties to recognize "not only that they would have access to their usual and accustomed fishing places, but also that there would be fish sufficient to sustain them," *Id.* at 92a, and that those assurances do not permit petitioner to "destroy the fish runs," *id.* at 91a.

Ignoring those assurances, petitioner focuses on the court of appeals' statement in a prior en banc opinion during Phase II of the original round of litigation in this case that "'*Fishing Vessel* did not hold that the Tribes were entitled to any particular minimum allocation of fish'" and instead "'mandates an allocation of 50 percent of the fish to the Indians, subject to downward revision if moderate living needs can be met with less.'" Pet. 20 (quoting *United States* v. *Washington*, 759 F.2d

1353, 1359 (9th Cir.) (en banc) (per curiam), cert. denied, 474 U.S. 994 (1985)). That passage, which comes from the portion of the opinion holding that hatchery fish must be included in the Tribes' harvest *allocation*, does not address the issue of degradation of fish habitat that results in diminishment of the *supply* of fish. In fact, as the court of appeals stated in the sentence prior to the passage cited by petitioner, "*Fishing Vessel*'s holding that the Tribes are entitled under the treaty to an '*adequate supply of fish*' supports the inclusion of hatchery fish in the allocation." 759 F.2d at 1358 (emphasis added). That the Tribes are entitled to a share of hatchery fish in part as mitigation for the decline in the supply of fish "caused by their non-Indian neighbors" is consistent with an interpretation of the treaty fishing right that includes rights relating to the supply of fish. *Id.* at 1360. If the Tribes had no rights relating to the supply of fish, petitioner would owe the Tribes no such mitigation.[2]

Other decisions have recognized that the Tribes' treaty fishing right presumes an adequate supply of fish

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[2] Petitioner has previously not taken issue with the proposition that the "moderate living" standard applies to the Tribes' treaty right and fish supply. In Phase II, the Tribes stated in the district court that their "treaty entitlement is to a quantity of fish sufficient to supply their needs for a moderate income." C.A. Supp. E.R. 145; see *id.* at 146-147 (stating that "even if nonnatural reductions in fish runs occur, they would not violate any Indian right to take fish so long as there continues to exist fish in sufficient quantities to meet the treaty fishermen's needs"). In the face of that statement, petitioner did not raise on appeal any meaningful issue regarding the application of the moderate living standard to the treaty right. Yet, in its rehearing petition, and now its petition to this Court, petitioner attacks (Pet. 21-22) the moderate living standard as unworkable.

and a duty on Indians and non-Indians not to unilaterally destroy or significantly impact the treaty-protected resource. See, *e.g.*, *United States* v. *Washington*, 573 F.3d 701, 704 (9th Cir. 2009) ("the treaty fishing right * * * 'exists in part to provide a volume of fish which is sufficient to the fair needs of the tribes'") (quoting *United States* v. *Washington*, 384 F. Supp. 312, 401 (W.D. Wash. 1974), aff'd, 520 F.2d 676 (9th Cir. 1975), cert. denied, 423 U.S. 1086 (1976)); *United States* v. *Washington*, 520 F.2d 676, 685 (9th Cir. 1975) ("neither the treaty Indians nor the [S]tate on behalf of its citizens may permit the subject matter of these treaties to be destroyed"), cert. denied, 423 U.S. 1086 (1976); see also *Department of Game* v. *Puyallup Tribe*, 414 U.S. 44, 49 (1973) (*Puyallup II*) (Tribes do not have an untrammeled treaty fishing right "to pursue the last living steelhead" into their own fishing nets that would unilaterally deny non-Indians the shared resource and their fair share of fish); *Puyallup Tribe, Inc.* v. *Department of Game*, 433 U.S. 165, 173-177 (1977). Thus, petitioner's citation to other cases (Pet. 20) that simply reference *Fishing Vessel's* allocation methodology of ensuring Tribes half of the harvestable share, adjusted downward if tribal needs can be met with less, has little force. Those cases cannot be read to say that petitioner, through its barrier culverts resulting in diminishment or destruction of fish runs, may leave far fewer (or no) fish for the Tribes.

b. Petitioner further contends (Pet. 22-25) that the court of appeals' decision conflicts with holdings of this Court on treaty interpretation. It does not. This is not a case in which the court of appeals has rewritten a treaty "'to remedy a claimed injustice'" or created a

"massive new right." Pet. 22-23 (quoting *Choctaw Nation of Indians* v. *United States*, 318 U.S. 423, 432 (1943)). The court relied on well-established standards of treaty construction to hold that the treaties reserved the Tribes' right to continue to take fish at their usual and accustomed fishing places to maintain their livelihood, and that petitioner's barrier culverts violated that right by blocking fish passage and significantly reducing fish population. Pet. App. 86a-96a. To reach that holding, the court looked to the express words of the fishing clause, treaty negotiations and other historical materials, and decisions of this Court addressing the fishing clause. *Ibid.* That approach is consistent with principles of treaty interpretation set forth in *Choctaw Nation*, as petitioner acknowledges (Pet. 22-23). See 318 U.S. at 431-432 (in ascertaining the meaning of treaties, courts "may look beyond the written words to the history of the treaty, the negotiations, and the practical construction adopted by the parties"); accord *Minnesota* v. *Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 196 (1999).

Moreover, petitioner's contention (Pet. 22) that the court of appeals declared a new right "nowhere mentioned in the treaties" ignores the canon governing Indian treaty interpretation that treaty words must be construed "in the sense in which they would naturally be understood by the Indians." *Jones* v. *Meehan*, 175 U.S. 1, 11 (1899). This Court has explicitly relied upon that rule to "broadly interpret[] [the Stevens Treaties] in the Indians' favor" in the past. *Fishing Vessel*, 443 U.S. at 675-676 (citing *Tulee* v. *Washington*, 315 U.S. 681 (1947); *Seufert Bros. Co.* v. *United States*, 249 U.S. 194 (1919)); see *Winans*, 198 U.S. at 381; see also Pet. App. 88a-90a (discussing cases). Petitioner's

contention also overlooks that the "'treaty [i]s not a grant of rights to the Indians, but a grant of rights from them—a reservation of those not granted,'" and thus silence implicates a reservation of rights under the treaty. *Winans*, 198 U.S. at 381 (citation omitted).

Nor does the court of appeals' decision conflict with the other decisions of this Court cited by petitioner. See Pet. 23. Both *Oregon Department of Fish & Wildlife* v. *Klamath Indian Tribe*, 473 U.S. 753 (1985), and *Oklahoma Tax Commission* v. *Chickasaw Nation*, 515 U.S. 450 (1995), involved the question whether treaty rights reserved within a tribe's reservation or limits could be extended by implication outside such areas. The treaty language in *Klamath Indian Tribe*, unlike the language of the Stevens Treaties, confirmed that the express tribal rights to hunt and fish were meant to exist only "within the limits of the reservation." 473 U.S. at 766; see *id.* at 766-768. Similarly, in *Oklahoma Tax Commission*, the treaty, by its plain terms, applied only to persons and property "'within [the tribe's] limits,'" such that even liberal construction could not support the tribe's claim. 515 U.S. at 465-466 (citation omitted). Here, the treaties expressly reserved fishing rights and interests both on and off the reservation.

The court of appeals also correctly relied on *Winters* v. *United States*, 207 U.S. 564 (1908), and *United States* v. *Adair*, 723 F.2d 1394 (9th Cir. 1983), cert. denied, 467 U.S. 1252 (1984), to hold that, even if Governor Stevens had not made an explicit promise that "'[t]his paper secures your fish,'" that promise should be inferred to support the purpose of the treaties because the Tribes' treaty right "would be worthless without harvestable fish." Pet. App. 91a-94a (quoting *Fishing Vessel*, 443 U.S. at 667 n.11). In *Winters*, this Court

held that the express reservation of land for the Fort Belknap Indian Reservation impliedly reserved a sufficient interest in water from the river to fulfill the purposes of the reservation. 207 U.S. at 576-577. Accordingly, the Court upheld an injunction barring non-Indians from diverting water upstream that was required to irrigate lands on the reservation. *Ibid.*; see *Adair*, 723 F.2d at 1408-1415 (treaty right to fish implied reservation of water to support tribal fisheries).

Here, the destructive consequences of state-owned barrier culverts on the Tribes' ability to harvest fish justified the injunction requiring petitioner to replace or modify barrier culverts. As this Court made clear in *Fishing Vessel*, the Tribes' reservation of the right to take fish at usual and accustomed grounds includes more than the bare right to "dip their nets" into treaty waters and net "virtually no catch at all." 443 U.S. at 679, 677 n.22. Rather, it includes recognition of a right that precludes others from "crowd[ing] the Indians out of any meaningful use of their accustomed places to fish," *id.* at 676, whether those impediments be fish wheels (*Winans*, 198 U.S. at 382-384), state laws restricting the means of taking fish when not required by conservation reasons (*Puyallup Tribe II*, 414 U.S. at 45, 48; *Puyallup Tribe* v. *Department of Game*, 391 U.S. 392, 398 (1968)), or—as here—building or maintaining culverts that interfere with the ability of salmon to migrate up or downstream.

c. Petitioner contends (Pet. 32-34) that this case warrants review because the court of appeals' decision will be "'used to attack a variety of development, construction, and farming practices * * * throughout the Pacific Northwest.'" Pet. 33 (citation omitted). That

concern is unfounded. The court made clear that its ruling is based on an exhaustive legal analysis of treaty fishing rights, the significant destructive impact of barrier culverts, and petitioner's duty as defined by the specific facts presented by this case. Pet. App. 11a-12a. The court adhered to the directive in the en banc decision in Phase II to evaluate habitat-protection duties based "upon concrete facts which underlie a dispute in a particular case." *Washington*, 759 F.2d at 1357. The future reach of this decision and the contours of the treaty right "will depend for its precise legal formulation on all of the facts presented by a particular dispute." *Ibid.*; see Pet. App. 11a-12a. Hence, Judge O'Scannlain's assertion (Pet. App. 28a-29a) that any activity that negatively affects fish habitat could be an "automatic Treaty violation" is wrong. In any event, petitioner does not contest that its culverts have a significant, deleterious effect on salmon populations, or that such effect can be remediated. As a result, and because the decisions below are based only on these "concrete facts," this case would be a poor vehicle to explore the possible application of the court of appeals' ruling in other circumstances.

2. Petitioner further contends (Pet. 25-28) that the court of appeals' decision conflicts with decisions of this Court and other courts of appeals on the applicability of equitable defenses to the treaty claims at issue. That is incorrect. In the district court, petitioner argued that action and inaction by the United States in funding and approving (or failing to object to) petitioner's culverts barred the United States from asserting a claim that those culverts violate the Tribes' treaty rights. Binding authority forecloses that argument, and the court of appeals correctly rejected petitioner's equitable defenses.

Only Congress can abrogate or limit rights reserved under an Indian treaty. *Mille Lacs Band of Chippewa Indians*, 526 U.S. at 202; *United States* v. *Dion*, 476 U.S. 734, 738-740 (1986); *Fishing Vessel*, 443 U.S. at 690. Accordingly, a defense to a suit by the United States to enforce rights under an Indian treaty cannot be based on actions of government officials allegedly waiving the rights of the Indians under the treaty. See *Cramer* v. *United States*, 261 U.S. 219, 234 (1923) (where Indians had rights of occupancy to land, "no officer or agent of the Government had authority to deal with the land upon any other theory," and the "acceptance of leases for the land from the defendant company by agents of the Government was, under the circumstances, unauthorized and could not bind the Government; much less could it deprive the Indians of their rights"); *Pine River Logging Co.* v. *United States*, 186 U.S. 279, 291 (1902) (government agents had no authority to waive terms of Indian timber contracts, and their actions could not estop the government); *United States* v. *City of Tacoma*, 332 F.3d 574, 581 (9th Cir. 2003) ("when the government acts as [a] trustee for an Indian tribe, it is not at all subject to that defense," *i.e.*, estoppel); *United States* v. *Ahtanum Irrigation Dist.*, 236 F.2d 321, 334 (9th Cir. 1956) (no defense of laches or estoppel available against Government acting as trustee for Indian tribe), cert. denied, 352 U.S. 988 (1957).

Petitioner contends (Pet. 25-28) that the court of appeals' rejection of petitioner's equitable defenses conflicts with this Court's decision in *City of Sherrill* v. *Oneida Indian Nation*, 544 U.S. 197 (2005), and Second Circuit cases applying that decision. In *Sherrill*, this Court considered the Oneida Nation's claim to immun-

ity from taxation for land that had been out of its possession for more than 200 years. *Id.* at 202-203. Given the longstanding, distinctly non-Indian character of central New York and its inhabitants, the regulatory authority over the area constantly exercised by that State and its counties and towns for 200 years, and the Oneidas' long delay in seeking judicial relief, the Court found that standards of federal Indian law and equity practice precluded the Tribe from unilaterally reviving its sovereignty over the parcels at issue. *Id.* at 202-203, 214-220.

As the panel below explained, this case is "radically different" from *Sherrill*. Pet. App. 99a. This case does not involve an attempted unilateral assertion of sovereignty over territory that had lost its Indian character many years earlier. Unlike in *Sherrill*, there can be no argument here that the Tribes have done anything to authorize petitioner to construct and maintain barrier culverts or have attempted to revive a long-dormant dispute. *Ibid.* To the contrary, the Tribes and petitioner "have been in a more or less continuous state of conflict over treaty-based fishing rights for over one hundred years." *Ibid.* Moreover, the Court in *Sherrill* had no occasion to consider whether equitable defenses would apply against the United States or to specific rights directly arising from a treaty.

Nor does the court of appeals' decision conflict with Second Circuit cases applying *Sherrill*, as petitioner contends (Pet. 26-27). In those cases as well, the Second Circuit did not consider whether actions of federal officials could waive the treaty rights of tribes and subject treaty claims by the United States on behalf of the tribes to waiver or other equitable defenses. In *Cayuga Indian Nation* v. *Pataki*, 413 F.3d 266 (2d Cir. 2005),

cert. denied, 547 U.S. 1128 (2006), the majority held in factual circumstances similar to *Sherrill* that the doctrine of laches could be applied to a land claim by the United States on behalf of a tribe, at least in "'egregious instances'" involving very long delay and where relief would be highly disruptive. *Id.* at 278-279 (citation omitted). This case does not involve an ancient land claim that would be disruptive of long-established patterns on non-Indian ownership. And the holding in *Cayuga Indian Nation* was limited to laches, and it did not suggest that the court there would have accepted a defense based on waiver due to the actions of federal officials. Likewise, the other Second Circuit cases cited by petitioner did not suggest that there is a waiver defense against claims of tribes in circumstances such as in this case. See *Oneida Indian Nation* v. *County of Oneida*, 617 F.3d 114 (2010), cert. denied, 565 U.S. 970 (2011); *Stockbridge-Munsee Cmty.* v. *New York*, 756 F.3d 163 (2014) (per curiam), cert. denied, 135 S. Ct. 1492 (2015).

Moreover, the factual circumstances that led this Court and the Second Circuit to rely on principles of equity to reach their holdings are not present here. This is not a case in which the Tribes or the United States did nothing to assert their rights for two centuries. See *Ute Indian Tribe of the Uintah* v. *Myton*, 835 F.3d 1255, 1263 (10th Cir. 2016) (distinguishing *Sherrill* "on a very different record where the land was sold to nontribal members and neither the tribe nor the federal government did anything to assert their rights '[f]rom the early 1800's into the 1970's'") (citation omitted) (brackets in original), cert. denied, 137 S. Ct. 2328 (2017). Rather, the treaty fishing right has been repeatedly asserted by the Tribes and consistently upheld by this Court for more than a century.

3. Petitioner further contends (Pet. 28-32) that the court of appeals' decision conflicts with decisions of this Court addressing the proper scope of injunctive relief. According to petitioner (Pet. 28), this Court's precedents dictate that injunctions must be narrowly tailored to redress violations of federal law, must be imposed only after careful consideration of public impacts, and must consider federalism principles when entered against a State. After forgoing any input into the development of the remedy before the district court, petitioner now contends (Pet. 29-32) that the injunction violates those principles. Petitioner's fact-bound and untimely challenges to the terms of the injunction ignore the extensive evidence presented in the district court and present no issue warranting review by this Court.

a. Petitioner contends (Pet. 29-30) that the injunction requires it "to replace culverts that will make no difference" to salmon because of the presence of some barrier culverts owned by others on the same streams. But as the court of appeals held, it was appropriate for the district court to require petitioner to remedy its barrier culverts on streams notwithstanding that the streams might have other man-made barriers. The district court in this regard merely followed the same methodology that petitioner uses to identify and prioritize culverts that should be remedied. Pet. App. 15a, 110a-111a. Furthermore, Washington law imposes some obligation to allow fish passage on non-state barrier culverts, many of which are in the process of being repaired or replaced by private parties. *Id.* at 16a, 110a-111a. State reports have shown that in nearly 90% of such cases, other barriers were upstream of state-owned barrier culverts, and 69% of the 220 downstream non-state barriers allowed partial passage of

fish. *Id.* at 111a. And, as the court of appeals noted, the injunction allows petitioner to postpone hundreds of lower priority culverts, which must "be remediated only at the end of their natural life or in connection with an independently undertaken highway project." *Id.* at 16a. Petitioner's contention that the injunction requires it to expend unnecessary costs to address its barrier culverts lacks merit and its cost estimates are not supported by evidence in the record. *Id.* at 118a-119a; *id.* at 16a (finding "no plausible basis for the State's claim of $1.88 billion").

b. Contrary to petitioner's contention (Pet. 30-31), the record also "contains extensive evidence, much of it from [petitioner] itself," that state-owned barrier culverts have a substantial adverse effect on salmon. Pet. App. 115a. The district court's findings show that petitioner has admitted for years, including in the 1997 WDFW and WSDOT report, *id.* at 147a, that barrier culverts diminish salmon production and that correction of state-owned barrier culverts is critical to salmon recovery, see *id.* at 115a, 131a, 147a, 155a. Based on an extensive record, the district court found that "State-owned barrier culverts * * * have a significant total impact on salmon production," *id.* at 162a, and that "[c]orrection of fish passage barrier culverts is a cost-effective and scientifically sound method of salmon habitat restoration [that] provides immediate benefit in terms of salmon production," *id.* at 166a.

c. Petitioner's federalism-based objections to the injunction (Pet. 29-30) rely on general language from cases involving conventional structural injunctions, not enforcement of Indian treaty rights. See, *e.g.*, *Horne* v. *Flores*, 557 U.S. 433, 448 (2009) (requiring compliance with the Equal Educational Opportunities Act of 1974,

20 U.S.C. 1701 *et seq.*); *Rizzo* v. *Goode*, 423 U.S. 362 (1976) (requiring reform of police department). In *Fishing Vessel* and other cases directly on point, this Court "affirmed detailed injunctions requiring [petitioner] to comply with the very Treaties at issue in this case." Pet. App. 124a. The injunctions ordered in earlier phases of the case were broader in scope than the injunction here, which only puts petitioner on a schedule to identify and repair or replace barrier culverts. In *Fishing Vessel*, this Court stressed that the treaties are the supreme law of the land in rejecting federalism-based objections to injunctive relief against petitioner; it also stressed that the district court has discretion to issue a "detailed remedial order[]" against petitioner to provide the Tribes with meaningful relief under the treaties. 443 U.S. at 695-696.

d. There is no merit to petitioner's contention (Pet. 31-32) that the injunction is an abuse of discretion because it did not properly balance the equities at stake. The injunction is limited to correction of barrier culverts, Pet. App. 117a-118a, and the relevant cost to the State is that attributable to an accelerated schedule of culvert-correction that is already underway, which the district court found was necessary to remedy the treaty violation. *Id.* at 117a-118a, 177a. As the courts below found, moreover, "'[t]he balance of hardships tips steeply toward the Tribes,'" which were promised that they would be able to meet their subsistence needs forever. *Id.* at 121a. In any event, the reopening of salmon habitat that will be accomplished by corrected barrier culverts will benefit all citizens of Washington, *id.* at 178a, and honor what this Court recognized in *Fishing Vessel* was the central promise made to the Indians that the opening up of the Territory (and later the State) to

settlement would not crowd out the Indians from their ability to sustain themselves by taking fish at usual and accustomed grounds. 443 U.S. at 676.

This Court granted certiorari in *Fishing Vessel* "[b]ecause of the widespread defiance of the [d]istrict [c]ourt's orders" and an ongoing and irreconcilable conflict between the rulings of the Washington Supreme Court and federal courts concerning the questions presented. 443 U.S. at 679; see Pet. 9. There is no such conflict here, and there are no widespread practical exigencies that would require this Court's intervention. On the basis of an extensive factual record, the lower courts have succeeded in bringing this case to a fair resolution: the Tribes retain the fishing rights they were promised, and petitioner has only the duty to address barrier culverts (which it recognizes constitute a serious problem) based on a reasonable schedule with significant flexibility. No further review is warranted.

CONCLUSION

The petition for a writ of certiorari should be denied.

Respectfully submitted.

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In The Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.,

Respondents.

On Petition For A Writ Of Certiorari To The United States Court Of Appeals For The Ninth Circuit

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QUESTIONS PRESENTED

1. Whether the Court of Appeals erred in holding that Washington lacks license to destroy treaty fisheries through direct, in-stream blockages, where that holding conflicts with no decision of this Court or any other court and is demonstrably faithful to the treaty language and history.

2. Whether the Court of Appeals erred in holding that the federal government may abrogate tribal treaty rights only through express congressional action, rather than through inferences drawn by the State from the putative actions of federal bureaucrats with no responsibility for tribal affairs.

3. Whether the Petition's twice-discredited assertions regarding the cost and scope of the district court's injunction warrant this Court's review.

PARTIES

Petitioner is the State of Washington, which, together with the Director of the State Department of Fisheries and Wildlife, was defendant at trial, and appellant at the Ninth Circuit.

Respondents are the United States of America, Confederated Tribes and Bands of the Yakama Nation, Hoh Indian Tribe, Jamestown S'Klallam Tribe, Port Gamble S'Klallam Tribe, Lower Elwha Klallam Tribe, Lummi Nation, Makah Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Nooksack Tribe, Puyallup Tribe, Quileute Indian Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe of Indians, Suquamish Indian Tribe, Swinomish Indian Tribal Community, Tulalip Tribes, and Upper Skagit Indian Tribe. Respondents were the plaintiffs at trial and the appellees at the Ninth Circuit.

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INTRODUCTION

This case concerns the passage of treaty-protected fish. The core facts are largely beyond dispute. For centuries, the culture and economy of the western Washington Tribes depended on salmon, which returned from the Pacific in immense numbers to spawn in local streams. When those Tribes entered into Treaties ceding their homelands to the United States, they insisted upon a permanent right to continue taking the fish that were their lifeblood. Today, those federal treaty rights are threatened. The State maintains hundreds of barrier culverts that prevent salmon from completing their normal migration to and from the ocean. There is no serious question about the culverts' impact. The State's own agencies have documented the resulting devastation to the fisheries, and the district court made detailed findings in this regard. Nor is there any doubt about the State's ability to fix the problem – again, the State's own agencies have demonstrated the feasibility of remediating the culverts to simulate normal stream flow. Nevertheless, the State has resisted repeated calls to respect the Tribes' federal treaty rights, ignoring the Tribes, the State's own commercial fishermen, and even the head of its own Department of Natural Resources, all of whom have urged the State to comply with the law and preserve the fisheries.

Faced with the State's inaction, the Tribes and the United States turned to federal court to vindicate the Tribes' federal rights. The courts below correctly recognized that the right to fish is of little value if the State can bar the streams, and thus properly held the State's

refusal to remediate its fish-destroying culverts to violate the Treaties. The State's arguments notwithstanding, this narrow and straightforward holding broke no new ground. It fully accords with the treaty text and the clear promises made by the United States treaty negotiators – promises previously reviewed and explicated by this Court. The holding conflicts with no appellate decision, and hews faithfully to the seven prior decisions of this Court interpreting the Treaties. And it is consistent with state policy. Since statehood, and in accordance with dictates dating back centuries, Washington has required that in-stream barriers allow for fish passage, and nearly seven decades ago Washington's Attorney General made clear that this requirement applies to road culverts.

To argue for certiorari, therefore, the State has to turn this case into something that it is not. Legally, the State claims that this case disposes of issues ranging from land use to water rights, when truly it is a case about fixing state culverts that obstruct fish passage. Factually, it asks this Court to ignore the district court's detailed, well-supported findings, affirmed by the Court of Appeals, on issues ranging from the historical intent of the treaty negotiators to the present-day harm caused by its culverts. The Petition overstates the scope of the injunction, distorting the district court's careful tailoring beyond recognition, and repeats cost estimates that have been thoroughly discredited. These efforts do not transform the careful,

record-based conclusions drawn below into ones warranting this Court's review.

STATEMENT OF THE CASE

I. FACTUAL BACKGROUND

A. The Stevens Treaties

From time immemorial, the Indians of western Washington have been a fishing people. "[A]ll of them shared a vital and unifying dependence on anadromous fish," *Washington v. Wash. State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 664 (1979) ("*Fishing Vessel*"), which "was the great staple of their diet and livelihood," *id.* at 665 n.6.[1] In 1854 and 1855, the United States negotiated a series of treaties with the Respondent Tribes, who insisted upon one permanent, overriding condition for their land cessions: that they maintain, on and off their reservations, the ancient fisheries that "were not much less necessary to

[1] Anadromous fish, including salmon and steelhead, "hatch in fresh water, migrate to the ocean where they . . . reach mature size, and eventually complete their life cycle by returning to the fresh-water place of their origin to spawn." *Fishing Vessel*, 443 U.S. at 662. *Fishing Vessel* was the last of seven decisions from this Court interpreting the Treaties at issue; it arose from the same litigation of which this case is a subproceeding. The detailed historical findings described and affirmed in *Fishing Vessel* significantly informed this Court's holdings. This Statement draws heavily from *Fishing Vessel*'s historical discussion, which likewise was relied upon (and supplemented) by the district court and the Court of Appeals here. The State introduced no historical evidence in this subproceeding.

the existence of the Indians than the atmosphere they breathed." *Id.* at 680 (quoting *United States v. Winans*, 198 U.S. 371, 381 (1905)).

The American treaty commissioners, led by Territorial Governor Isaac Stevens, "recognized the vital importance of the fisheries to the Indians[.]" *Id.* at 666. They understood that securing those fisheries was critical to obtaining the Tribes' agreement, and would also allow the negotiators to satisfy their "very clear instructions" that the Tribes "not become a burden on the treasury." App. 268a. Accordingly, the Tribes "were invited by the white negotiators to rely and in fact did rely heavily on the good faith of the United States to protect [their fishing] right." *Fishing Vessel*, 443 U.S. at 667. Governor Stevens repeatedly assured the Tribes that they would remain able to sustain themselves through their fisheries, telling the Tribes that "[t]his paper secures your fish," *id.* at 667 n.11, and that they could rely on this essential sustenance "forever." App. 92a. As this Court concluded, "[the] Governor . . . and his associates were well aware of the 'sense' in which the Indians were likely to view [such] assurances. . . . [T]he vital importance of the fish to the Indians was repeatedly emphasized by both sides, and *the Governor's promises that the treaties would protect that source of food and commerce were crucial in obtaining the Indians' assent.*" *Fishing Vessel*, 443 U.S. at 676 (emphasis added); *see also* App. 91a; App. 128a-130a, FF1-2; App. 177a, CL17; App. 266a-268a.

The resulting Treaties contain virtually identical fishing clauses:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory[.]

Treaty of Medicine Creek art. III, Dec. 26, 1854, 10 Stat. 1132, 1133. In the ensuing decades, this promise was largely honored, and the "Indians continued to harvest most of the fish taken from the waters of Washington[.]" *Fishing Vessel*, 443 U.S. at 668.

By the end of the nineteenth century, however, the State began to "deliberately and systematically prevent[] the Tribes from engaging in the off-reservation fishing promised under the Treaties." App. 7a. The State waged a century-long campaign of oppressive and discriminatory regulation, mass arrests, and physical attacks to thwart the Tribes' exercise of their fishing rights. App. 69a-77a. The Tribes, with the assistance of the United States, fought to save their way of life. Repeated judicial intervention, necessitated by some of "the most concerted official and private efforts to frustrate a decree of a federal court witnessed in this century," and culminating in the decision in *Fishing Vessel*, 443 U.S. at 696 n.36, ensured that the rule of law prevailed and that the treaty promise was honored.[2]

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[2] The State resurrects the canard, often expressed during this period, that it was a "nonparty" to the Treaties. Pet. 1, 31. However, this Court has long held the State to be bound by them

The efforts of the Tribes and the United States to vindicate the Tribes' fishing rights have long extended to protecting the fisheries on which the rights depend, and it is those efforts – and the State's corresponding resistance – that occasioned the present dispute.

B. Barrier Culverts and the Decline in Washington's Fisheries

Across Washington, scores of roads cross waterways that salmon and steelhead use to migrate to the ocean and to return to their spawning grounds. When road builders do not bridge a waterway, they construct culverts that allow the stream to flow under the road. App. 77a-78a; App. 136a, FF3.29. "Stream simulation" culverts allow for the passage of water and fish, App. 137a-138a, FF3.37-3.38, 3.41, whereas a "barrier culvert" inhibits or prevents fish passage, App. 77a. No dispute exists that it is generally feasible to build stream simulation culverts to allow fish to pass. App. 137a-139a, FF3.35-3.47.

Since Magna Carta, proscriptions against barriers to fish passage have been common in Anglo-American law. *See* Magna Carta of 1215, ch. 33 ("All kydells for the future shall be removed altogether from [the Rivers] Thames and Medway, and throughout all England,

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under the Supremacy Clause. *See, e.g., Tulee v. Washington*, 315 U.S. 681 (1942). Indeed, the Tribes' land cessions paved the way for Washington statehood. *Winans*, 198 U.S. at 384.

except upon the sea shore.").[3] The Oregon Territory Organic Act barred obstruction of salmon streams that did not provide for proper fish passage. Act of August 14, 1848, § 12, 9 Stat. 323, 328. Just shortly before the Treaties were negotiated and signed, that prohibition became the law of the Washington Territory (of which Isaac Stevens was Governor) when it was carved out from Oregon in 1853. Act of March 2, 1853, § 12, 10 Stat. 172, 177. Washington retains fish passage laws to this day, Wash. Rev. Code §§ 77.15.320, 77.57.030, and since at least 1950, Washington has recognized that those laws apply to state highway culverts. Fish Passage Facilities for Highway Culverts, Wash. Att'y Gen. Op. No. 304 (July 19, 1950). *See* App. 140a, FF3.50 (admitted fact).

Unfortunately, while state law has long required culverts to pass fish, the State has constructed and maintains hundreds of culverts that do not. The State claims, remarkably, that no evidence exists that these barrier culverts harm salmon populations. Pet. 30-31. But its assertions are flatly contradicted by the district court's detailed factual findings, which were affirmed by the Court of Appeals and rest in significant part on the State's own admissions, including reports published by state agencies and the testimony of agency scientists.

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[3] Reprinted in English translation at http://avalon.law.yale.edu/medieval/magframe.asp.

The district court's thorough findings document how barrier culverts destroy salmon populations:

> Culverts which block the upstream passage of adult salmon returning to spawn render large stretches of streambed useless for spawning habitat, and reduce the number of wild salmon produced in that stream. Culverts which block stream areas in which juvenile salmon rear may interfere with their feeding and escapement from predators. Culverts which block the passage of juvenile salmon downstream prevent these salmon from reaching the sea and attaining maturity.

App. 174a-175a, CL7 (summarizing findings); *see also, e.g.*, App. 160a-162a, FF20-23, 26.

With respect to state barrier culverts specifically, the district court quantified, based on the Washington Department of Fish and Wildlife's ("WDFW's") own records, their singular impact on salmon spawning and rearing habitat:

> *State-owned barrier culverts are so numerous and affect such a large area that they have a significant total impact on salmon production. . . .* As of the trial date in 2009, there were 1,114 state-owned culverts in the Case Area, including at least 886 that blocked "significant habitat". . . . WDFW records showed at that time that State-owned barrier culverts blocked salmon access to an estimated 1,000 miles of stream and nearly five

> million square meters of habitat. Admitted Facts 3.64-3.71.

App. 162a, FF27 (emphasis added); *see also* App. 95a (affirming same); App. 115a ("The record contains extensive evidence, much of it from the State itself, that the State's barrier culverts have [a substantial adverse effect on salmon]."); App. 156a-157a, FF4; App. 109a.

The district court further made findings regarding specific rivers where barrier culverts have destroyed or substantially interfered with salmon populations. App. 161a, FF24-25; *see also* App. 110a-111a. It found that "[c]yclical patterns in ocean conditions and other natural disturbances cannot account for *the persistent, long-term downward trend in Case Area salmon populations*." App. 158a, FF15 (emphasis added). And, again contrary to the State's claims, it found that "[c]orrection of fish passage barrier culverts is a cost-effective and scientifically sound method of salmon habitat restoration. It provides immediate benefit in terms of salmon production, as salmon rapidly re-colonize the upstream area and returning adults spawn there. Exhibit AT-004, p. 12." App. 166a-167a, FF38; *see also* App. 111a-114a. Indeed, as the district court noted, the State's own fisheries agency "*has recognized that culverts must be corrected in order to accomplish the State's salmon recovery efforts*[.]" App. 155a, FF3.131 (admitted fact) (emphasis added); *see also* App. 130a, FF3.1; App. 156a, FF3.132-3.134 (admitted facts).

In 1997, the state legislature created a Fish Passage Task Force, co-chaired by the WDFW and the Washington

State Department of Transportation ("WSDOT"), and including governmental and industry representatives. App. 147a, FF3.88. The Task Force reported "that fish passage barrier culverts are a 'key factor' in the wild salmon equation" and that "the creation of new barriers must be prevented and the rate of barrier correction must be accelerated if Washington wild salmon and trout stocks are to recover." App. 147a, FF3.89 (quoting Task Force Report) (internal quotation marks omitted). Thereafter, WDFW, State Parks, and the Washington Department of Natural Resources ("WDNR") took steps to remediate their barrier culverts. App. 148a, FF3.90; App. 166a, FF36-37. However, the vast majority of state barrier culverts are operated by WSDOT, whose remediation has been so slow that the district court found that even "assuming no new barrier culverts were to develop, it would take the State more than 100 years to replace the 'significantly blocking' WSDOT barrier culverts that existed in 2009." App. 163a, FF28.

But neither the fish nor the Tribes have a century to wait. "Salmon abundance has declined precipitously from treaty times, but particularly in the last few decades." App. 157a, FF7; *see also* App. 174a, CL6 ("Salmon stocks in [western Washington] have declined alarmingly[.]"); App. 85a. And "[t]he Tribes and their individual members have been harmed economically, socially, educationally, and culturally by the greatly reduced salmon harvests that have resulted from . . . State-maintained fish passage barriers." App. 176a, CL14; *see also* App. 85a (quoting App. 158a,

FF10); App. 157a-158a, FF9-13 (describing impacts on Tribes from decline in fisheries). Non-Indian fishermen have likewise suffered greatly from the deterioration of the fisheries, App. 157a, FF8; App. 167a, FF39; App. 175a, CL11, and have voiced strong support for the district court's injunction. Pacific Coast Fed'n of Fishermen's Ass'n Amicus Brief, 9th Cir. Dkt. 66-1, 66-2. As the head of the WDNR summarized in urging the Washington Attorney General not to file a Petition here, "Salmon runs continue to decline across the state. . . . Saving our salmon is not simply a tribal issue. It is a Washington issue[.]" Tribal Respondents App. 1a-2a.

II. COURSE OF PROCEEDINGS

The United States and tribal plaintiffs filed *United States v. Washington* in 1970, challenging interference with tribal harvest through discriminatory state regulation and enforcement and fishery depletion through habitat alteration, including barrier culverts. *United States v. Washington*, 384 F. Supp. 312, 328 (W.D. Wash. 1974). The district court bifurcated the proceedings. In Phase I, it apportioned the harvest to allow sufficient fish for tribal needs and enjoined contrary state regulation. *Id.* at 342-44, 401-02, 414-19. It retained jurisdiction to resolve the Phase II habitat and hatchery fish issues and other fishing disputes that might arise. *Id.* at 333.

Following Ninth Circuit affirmance and subsequent proceedings engendered by state resistance to

the district court's decrees, this Court held that, in order to meet their moderate living needs, the Tribes have a right of up to half the harvest in their usual and accustomed fishing waters. *Fishing Vessel*, 443 U.S. at 686-87. The Court deemed hatchery fish issues broached by the parties as beyond the scope of its review, as the district court had not yet ruled in Phase II. *Id.* at 688 n.30.

The district court subsequently issued a broad declaration, applicable to all state activities and without reference to a particular dispute, that the State had a duty "to refrain from degrading the fish habitat to an extent that would deprive the tribes of their moderate living needs." *United States v. Washington*, 506 F. Supp. 187, 208 (W.D. Wash. 1980). On rehearing en banc, the Ninth Circuit, with then-Judge Kennedy on the panel, emphasized that "[t]he State of Washington is bound by the [Treaties]," *United States v. Washington*, 759 F.2d 1353, 1357 (9th Cir. 1985) (per curiam), but vacated the district court's declaration as contrary to sound judicial discretion. "[T]he measure of the State's obligation will depend for its precise legal formulation on all of the facts presented by a particular dispute." *Id.*

In 2001, following the State's failure to take meaningful action regarding WSDOT barrier culverts following the 1997 Task Force Report, *supra* at 9-10, the Tribes initiated this sub-proceeding under the district court's continuing jurisdiction. The United States joined, seeking the same relief. On cross-motions for summary judgment, the district court declared that

the State's barrier culverts violated the Treaties. App. 271a. The court then held a trial to determine the propriety and scope of injunctive relief. App. 84a. The State declined the district court's invitation to propose injunction terms, stating only that it had not violated the Treaties and hence that no injunction should issue. App. 107a.

The district court's final opinion included extensive findings of fact and conclusions of law. App. 128a-179a. It held that the State had violated a "narrow and specific treaty-based duty," App. 178a, CL19, "to refrain from building or operating culverts . . . that hinder fish passage and thereby diminish the number of fish that would otherwise be available for Tribal harvest." App. 271a; App. 174a, CL4.

The district court made numerous detailed findings, discussed above, regarding the harm to the fisheries from state-owned barrier culverts; the resulting injury to the Tribes' economy and culture; and the concomitant injury to the State's non-Indian commercial and sports fishermen. *Supra* at 8-11. It found that the costs of fixing WSDOT culverts were far less than the State was predicting and that the State's culverts would need to be replaced at the end of their useful life in any event, or in connection with highway projects. App. 170a, FF48. Even the State's inflated claims of $117 million in annual costs, App. 118a, would easily fall within the Department of Transportation's budget (which was $7.88 billion for the 2011-2013 biennium), and such spending would have no effect on other state programs because of the segregation of the

transportation budget. App. 171a-173a, FF54-60; App. 177a-178a, CL17.

The district court also found that at its current rate of culvert remediation, the WSDOT would not finish the job for more than a century, if ever. App. 162a-164a, FF28-31. It concluded that "[t]he balance of hardships tips steeply toward the Tribes in this matter," App. 177a, CL16, and that the public interest favors an injunction because the Tribes, non-Indian fishermen, and Washington's iconic fisheries and related economic activity will all benefit, App. 178a, CL18.

The district court carefully tailored the injunction to remedy the barrier culverts while minimizing the burden on the State. The court's injunction "divide[s] WSDOT barrier culverts into two categories. High priority category culverts [those blocking more than 200 meters of habitat] must be remediated within seventeen years. Low priority category culverts must be remediated only at the end of the natural life of the existing culvert, or in connection with a highway project that would otherwise require replacement of the culvert." App. 14a. In addition, high priority "culverts blocking a total of ten percent of the accessible upstream habitat above all the high priority culverts [] can be remediated on the schedule of low priority culverts." App. 14a-16a; *see also* App. 237a-238a, §§ 6-8. By the State's own calculations, approximately 230 high-priority state culverts can be deferred under this latter provision. App. 15a-16a; App. 119a; App. 238a, § 8. The injunction also requires the State's natural

resource agencies to correct their barrier culverts by 2016, as already required by state law and policy. App. 237a, § 5.

The State did not seek a stay of the injunction. The natural resource agencies largely completed their corrections by the 2016 deadline.[4]

The State appealed. In a thorough opinion, the Ninth Circuit affirmed the district court's extensive findings of fact and its determination that the State has acted in violation of the Treaties by maintaining barrier culverts, as well as the propriety and scope of its injunction. App. 58a-126a, 1a-17a. The Circuit denied rehearing en banc, over a dissent authored by Judge O'Scannlain. App. 17a-42a. This Petition followed.

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[4] https://data.results.wa.gov/reports/G3-2-2-c_Fish-Passage-Barriers.

REASONS FOR DENYING THE PETITION

I. THE COURTS BELOW CREATED NO CONFLICT, BUT INSTEAD HEWED CLOSELY TO THE TREATY LANGUAGE AND THIS COURT'S PRECEDENTS, IN HOLDING THAT WASHINGTON DOES NOT HAVE LICENSE TO DESTROY THE TREATY FISHERIES.

A. The Court of Appeals' Interpretation of the Stevens Treaties Creates No Conflict in Lower Court Authority.

Washington argues that, despite securing to the Tribes the right of taking fish, the Stevens Treaties place no restriction on the State's ability to extirpate the fish runs that form the subject matter of the treaty right. "The State contended, and continues to contend, that it can block every salmon-bearing stream into Puget Sound without violating the Treaties." App. 8a; *see also* App. 87a-88a (quoting oral argument); App. 83a (quoting State's Answer). That cannot be correct, as it would nullify the Tribes' carefully negotiated fishing rights. The Court of Appeals recognized this and rejected the State's novel position. It did so cautiously, "hold[ing] only that the State violated the Treaties when it acted affirmatively to build roads across salmon bearing streams, with culverts that allowed passage of water but not passage of salmon." App. 10a-11a; *see also* App. 96a; App. 84a. No court of appeals or state supreme court takes the contrary view – namely, that a State can freely destroy treaty-reserved fisheries despite the absence of treaty language giving it that authority. As the State does not contest, the decision

below accordingly creates no conflict in lower court authority.

B. The Court of Appeals' Decision Does Not Conflict with *Fishing Vessel*.

The State's principal argument for certiorari is that the decision below "interprets a federal treaty in a way that rejects this Court's prior reading of the exact same language in this very case." Pet. 18. But the conflict alleged with *Fishing Vessel* is illusory. *Fishing Vessel* addressed the allocation of the fisheries, and held that "an equitable measure of the common right should initially divide the harvestable portion of each run that passes through a 'usual and accustomed' place into approximately equal treaty and nontreaty shares, and should then reduce the treaty share if tribal [moderate living] needs may be satisfied by a lesser amount." 443 U.S. at 685. *Fishing Vessel* so held because the Treaties secure the Tribes' right to take fish "in common with all citizens," *id.* at 674, and "[s]ince the days of Solomon, [an equal] division has been accepted as a fair apportionment of a common asset," *id.* at 686 n.27.

The Court of Appeals, by contrast, addressed whether the Treaties place any limits on the State's ability to destroy the fisheries that form the Treaty *res*, and held that they do. There is no inconsistency between these two holdings.

First, the procedural history of this case precludes the State's assertion of a conflict. As discussed above,

Judge Boldt bifurcated the proceedings in *United States v. Washington*, with Phase I focused on the tribal share of the fisheries and Phase II on issues relating to the overall number of fish, including in-stream barriers. *Supra* at 11; App. 78a. *Fishing Vessel* arose from the lower court proceedings in Phase I, *see* 443 U.S. at 674, and the Court recognized that Phase II issues were not "fairly subsumed within [the] grant of certiorari." *Id.* at 688 n.30. The State thus claims a conflict with *Fishing Vessel* on an issue not before the *Fishing Vessel* Court.

Second, the State's asserted conflict depends on a patent distortion of the decision below. The Court of Appeals addressed a question left open in *Fishing Vessel*, namely whether the Treaties place any limits on the State's ability to destroy the treaty fisheries. In answering that question, the Court of Appeals' decision was narrow. Thus, the court did *not* hold that the Tribes are entitled to enough salmon to provide a moderate living irrespective of the obligation to share harvest, App. 78a-79a, and despite variations in circumstances. *See* App. 10a-11a ("We do not hold that the Treaties' promise of a moderate living is valid against acts of God. . . . Nor do we hold that the promise is valid against all human-caused diminutions, or even against all State-caused diminutions."). It held "only that the State violated the Treaties when it acted affirmatively to build . . . culverts that allowed passage of water but not passage of salmon." *Id.*; *see also* App. 128a (district court holding).

There simply is no contradiction between this holding and *Fishing Vessel*'s allocation determination. That the "in common with" language limits the tribal share does not suggest the State may reach in and destroy the fish subject to that share. Indeed, only two Terms earlier, this Court had held that the Treaties do not allow one party to frustrate the rights of others through destruction of the fisheries. *Puyallup Tribe, Inc. v. Dep't of Game*, 433 U.S. 165, 176 (1977) (Puyallup Tribe could not "interdict completely the migrating fish" passing through its reservation as that would impair the rights of non-Indian fishers). Only by ignoring the textual, "in common with" basis for the equitable allocation of the fisheries can the State argue that this Court explicitly considered an issue not before it and rejected all limits on the State's ability to eviscerate the Tribes' share.

Third, the State errs in seeing a conflict in the Court of Appeals' characterization of the purpose of the treaty promise as being "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." App. 94a (citing *Fishing Vessel*, 443 U.S. at 686). Indeed, this language from the decision below should surely sound familiar, as it tracks this Court's statement in *Fishing Vessel* nearly verbatim:

> As in *Arizona v. California* and its predecessor cases, the central principle here must be that Indian treaty rights to a natural resource that once was thoroughly and exclusively exploited by the Indians secures so much as, but no more than, is necessary to provide the Indians

> with a livelihood – that is to say, a moderate living.

443 U.S. at 686. Far from "reject[ing] this Court's prior reading of the . . . [treaty] language," Pet. 18, then, the Court of Appeals described the fishing right in virtually identical terms.

Indeed, the Court of Appeals relied on the moderate living standard much as this Court did in *Fishing Vessel*. Just as this Court used the standard to bound the tribal share, the Court of Appeals used it to bound the State's obligation to maintain culverts for fish passage – while recognizing that the Tribes cannot exceed their share "even if the supply of salmon is insufficient to provide a moderate living." App. 10a. That is not conflict, but agreement.

Fourth, the factual conclusions in *Fishing Vessel* confirm the absence of a conflict. As discussed above, this Court detailed three sets of factual findings concerning the treaty negotiations and historical context that substantially informed its holding. *Supra* at 4. Thus, it described: (1) the tremendous significance of the anadromous fisheries to the Washington Tribes, and their insistence on retaining those fisheries in order to survive; (2) the United States' recognition of that dependence and its determination, motivated by concern for the Tribes and by self-interest, that the fisheries be protected; and (3) the resulting assurances, "crucial in obtaining the Indians' assent," that "the treaties would protect [their] source of food and commerce," 443 U.S. at 676.

The Court of Appeals and the district court relied heavily on these same findings, and on additional uncontroverted historical evidence, in concluding that the treaty negotiators would not have understood the State to possess the right to block fish passage and thereby to destroy the fisheries the United States had promised to protect. App. 7a; App. 79a; App. 84a; App. 129a-130a; App. 263a-266a. Far from conflicting with *Fishing Vessel*, then, the decisions below fully comport with the conclusions that this Court drew from the historical record.[5]

In sum, the State's principal argument, that of a purported conflict with *Fishing Vessel*, provides no basis for the writ to issue.

C. The Court of Appeals' Decision Conflicts with No Other Decision of This Court.

The State argues that the Court of Appeals' decision also "conflicts with this Court's holdings about treaty interpretation." Pet. 22. That is flatly incorrect.

The State first asserts that the decision contravenes the statement in *Choctaw Nation of Indians v.*

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[5] The State additionally argues that the "moderate living" standard is "unworkable." Pet. 21. In other words, it argues that the Court of Appeals' reliance on a standard ratified in *Fishing Vessel* creates a conflict with *Fishing Vessel* – which underscores the flimsiness of the asserted conflict. The argument also smacks of hypocrisy. The State has not hesitated to rely on the moderate living standard in arguing that the tribal share of various fisheries should be capped. *See, e.g.*, *United States v. Washington*, 157 F.3d 630, 651-52 (9th Cir. 1998).

United States, 318 U.S. 423, 432 (1943), that Indian treaties "cannot be rewritten or expanded beyond their clear terms," because the Court of Appeals purportedly ignored the treaty provision by which the Tribes ceded land. But no matter how strenuously the State and its amici claim that the "import" of the Court of Appeals' holding is "that the Tribes silently retained a right to control land use decisions," Pet. 23, the court held only that the State cannot maintain culverts that block fish passage, a decision that has no implications for land use.

In addition, for over a century this Court has held that the cession language is qualified by the treaty fishing clause, which reserves to the Tribes various pre-existing rights in the ceded territory. *Winans*, 198 U.S. at 381. The State nowhere explains how its assertion of unlimited authority to block 1,000 miles of streams and destroy the fish runs in them squares with the Treaties' express promise that "[t]he right of taking fish, at all usual and accustomed grounds and stations, *is further secured to said Indians*[.]" Treaty of Medicine Creek art. 3, 10 Stat. at 1133 (emphasis added). Under the State's theory, the Tribes would enjoy no security at all in their fishing right – it would exist entirely at the mercy of the State, which could unilaterally destroy that which the Tribes insisted upon as a prerequisite to their land cession.

The State next questions the lower courts' reliance on statements of Governor Stevens and his fellow negotiators at the treaty councils to interpret the text of the Treaties that they drafted. Pet. 23-24. But seven

decisions of this Court have construed the language of the Treaties in light of that negotiating record. And while the State reads *Fishing Vessel* differently than did the courts below, *Fishing Vessel* unquestionably looked to the statements of the treaty negotiators in construing the treaty language, which has been a hallmark of this Court's approach to treaty interpretation. "*This review of the history and the negotiations of the agreements is central to the interpretation of treaties.*" *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 202 (1999) (emphasis added); *see also Oliphant v. Suquamish Indian Tribe*, 435 U.S. 191, 206 (1978) (treaty language is to be "read in light of the common notions of the day and the assumptions of those who drafted [it]"); *Eastern Airlines, Inc. v. Floyd*, 499 U.S. 530, 535 (1991) (applying same principles to construction of non-Indian treaty).

D. No Occasion Exists for Revisiting the Careful, Factbound Examination of the Historical Record Conducted by the Courts Below.

The State – which did not put on or controvert any historical evidence in this subproceeding – makes a faint attempt to question the district court's detailed historical findings by asserting that the parties' "practical" construction suggests the State is free to destroy treaty fisheries. Pet. 24. The State wisely does not belabor this argument, which would require this Court to revisit the lower courts' careful findings of historical

fact – findings fully consistent with those affirmed in *Fishing Vessel*.

Even if factbound error correction were the stuff of certiorari, the State makes no claim of error. As noted, the treaty language, negotiating history, and subsequent history of tribal harvests belie a State right to destroy the fisheries. That the "Tribes agreed in the treaties that roads could be built," Pet. 24, does not suggest that they and the United States agreed to fish barriers under those roads, *particularly when contemporaneous territorial law proscribed exactly that*. *Supra* at 7. The culvert and dam building cited by the State occurred decades after the Treaties, and nothing in the record indicates that the federal or state governments considered the Treaties as they undertook those activities.

E. The State's Attack on the Court of Appeals' Alternate Holding Suggests No Basis for this Court's Review.

The Court of Appeals held that "[e]ven if Governor Stevens had not explicitly promised that 'this paper secures your fish,' and that there would be food 'forever,' [it] would infer such a promise." App. 92a. This holding follows directly from this Court's seminal holding in *Winters v. United States*, 207 U.S. 564 (1908), that an explicit reservation of tribal rights in land implies the reservation of water rights necessary to their use. "Just as the land on the Belknap Reservation [in *Winters*] would have been worthless without water to

irrigate the arid land, . . . the Tribes' right of access to their usual and accustomed fishing places would be worthless without harvestable fish." App. 94a.

The State's attack on this holding provides no basis for review. First, the holding was in the alternative, and revisiting it would not affect the outcome below.

Second, the attack questions the factbound application of settled law. This Court enunciated the *Winters* doctrine over a century ago, and has reaffirmed it repeatedly. *See, e.g.*, *Cappaert v. United States*, 426 U.S. 128, 138 (1976); *Arizona v. California*, 373 U.S. 546, 599-600 (1963). The relevance of the doctrine to fishing rights under the Stevens Treaties was cemented in *Fishing Vessel*, which relied on *Arizona v. California* (a *Winters* case) for the "central principle" that the Treaties reserve fisheries to the tribes sufficient for a moderate living. 443 U.S. at 686.

Third, the State's claim of error is meritless. The State asserts that inferring a treaty right to fish passage through its culverts is unnecessary because both it and the federal government have the authority and "incentives to preserve salmon runs." Pet. 25. This, of course, has no bearing on the promises made in the text of the Treaties as explained by Governor Stevens in 1855. And the unchallenged and largely stipulated findings, as detailed above, are that there has been a precipitous decline in salmon stocks, resulting in great harm to the Tribes, and caused in no small part by the State's barrier culverts. App. 85a (quoting App. 158a, FF10; App. 174a, CL6-7). Washington's Attorney

General may be comfortable engaging in platitudes about state protection of the treaty fisheries, but the courts below were correct to respect history, the record, and the views of the State's natural resource agencies instead. App. 69a-77a.

II. THE COURTS BELOW CREATED NO CONFLICT IN REJECTING THE STATE'S EQUITABLE DEFENSE OF WAIVER.

The State challenges the rejection of its claim that the United States waived the Tribes' treaty rights by permitting or reviewing the design of some state culverts. Pet. 27. The Court of Appeals grounded this rejection in the principle that the United States "may abrogate a treaty with an Indian tribe only by an Act of Congress that 'clearly express[es an] intent to do so.'" App. 97a (brackets in original) (quoting *Mille Lacs*, 526 U.S. at 202). This is black-letter law, as this Court has long held that, because "Indian treaty rights are too fundamental to be easily cast aside," *United States v. Dion*, 476 U.S. 734, 739 (1986), "Congress' intention to abrogate Indian treaty rights [must] be clear and plain," *id.* at 738; *see also Mille Lacs*, 526 U.S. at 202-03; *Fishing Vessel*, 443 U.S. at 690.

The State does not and cannot argue abrogation by Congress because there has been none. It claims instead that employees of the Federal Highway Administration – with no responsibility for, apparent knowledge of, or attention to tribal issues – waived the Tribes' rights through their review of state culvert designs

before approving federal highway grants. Pet. 27. But no court has ever accorded to federal bureaucrats the awesome power to destroy treaty rights. Far from creating a conflict, the Court of Appeals' decision avoided one.

The State asserts that the fundamental principle that only Congress can waive and thereby abrogate treaty rights was overruled *sub silentio* by *City of Sherrill v. Oneida Indian Nation*, 544 U.S. 197 (2005), and has been disregarded by three later Second Circuit decisions. Pet. 25-27. But far from "brush[ing] aside *Sherrill*," *id.* at 26, the Court of Appeals analyzed it closely and properly determined that it does not apply here. App. 98a-99a; App. 12a. The United States was not a party to *Sherrill*. The equitable defenses that this Court upheld there were grounded in the passage of time: in particular, in the passage of two hundred years since the Oneida Nation sold its land, the settlement of that land by non-Indians, and the disruptive potential inherent in the Nation's reassertion of territorial jurisdiction after so many years. In sum, "the distance from 1805 to the present day, the Oneidas' long delay in seeking equitable relief against New York or its local units, and developments in the city of Sherrill spanning several generations, evoke the doctrines of laches, acquiescence, and impossibility, and render inequitable the piecemeal shift in governance this suit seeks unilaterally to initiate." *Sherrill*, 544 U.S. at 221; *see also id.* at 218-19. There is nothing like that here.

The Second Circuit has extended *Sherrill* to land claims involving the United States. *Stockbridge-Munsee Cmty. v. New York*, 756 F.3d 163 (2d Cir. 2014); *Oneida Indian Nation v. County of Oneida*, 617 F.3d 114 (2d Cir. 2010); *Cayuga Indian Nation v. Pataki*, 413 F.3d 266 (2d Cir. 2005). However, like the Court of Appeals, it has recognized that the *Sherrill* defenses remain grounded in the passage of time and inaction by tribes (and not just the United States). "In the wake of this trilogy – *Sherrill*, *Cayuga*, and *Oneida* – it is now well-established that Indian land claims asserted generations after an alleged dispossession are inherently disruptive . . . and are subject to dismissal on the basis of laches, acquiescence, and impossibility." *Stockbridge-Munsee*, 756 F.3d at 165; *see also Oneida*, 617 F.3d at 127.

The contrast between this case and *Sherrill* and its Second Circuit progeny is stark. There has been no abandonment of rights. The Tribes (and the United States) have fought for over a century to preserve the Tribes' treaty fishing rights, enduring oppressive state efforts that culminated in the "employ[ment of] surveillance planes, high powered boats, tear gas, billy clubs and guns against tribal members engaged in off-reservation fishing," App. 7a, coupled with "extraordinary machinations" by state courts and agencies in resisting federal court decrees protecting the Tribes' rights, *Fishing Vessel*, 443 U.S. at 696 n.36. And the Tribes' response has long included efforts to address state-owned barrier culverts. The Tribes and the United States pled claims respecting culverts at the

outset of *United States v. Washington*, and "[f]or many years, the Tribes had complained that the State had . . . built culverts under the roads that allowed passage of water but not passage of salmon." App. 8a. The Tribes' claims thus upset no "justifiable expectations," given their consistent assertion and the ancient provenance of Washington's ongoing fish passage obligations. The State accordingly did not argue to the Court of Appeals, and does not argue here, that the passage of time may bar the Tribes' claims. *Cf.* App. 17a-18a (time bar suggestion made in dissent from denial of rehearing en banc); *see also* App. 20a; App. 32a.

Because no plausible claim can be made that the Tribes seek to revive long-abandoned rights, there is no conflict with *Sherrill* and the Second Circuit's decisions. Indeed, under black-letter law regarding abrogation of tribal treaty rights, the State's waiver argument, not the Court of Appeals' rejection of it, is the outlier.

III. THE STATE'S RECORD-BOUND ATTACKS ON THE DISTRICT COURT'S INJUNCTION REST ON PREMISES THOROUGHLY DISCREDITED BELOW.

The State, which refused to participate in the shaping of the district court's injunction, now spills a great deal of ink attacking it. But its attacks implicate no unsettled questions of law. They are record-bound, and rely on assertions debunked below and contradicted by the state agencies possessing relevant

subject-matter expertise. After a detailed review of the injunction and underlying findings, the Court of Appeals concluded that "Washington misrepresents the evidence and mischaracterizes the district court's order." App. 108a. The same is true here, and the factual disputes presented by the State provide no basis for further review. Sup. Ct. R. 10; *Glossip v. Gross*, 135 S. Ct. 2726, 2740 (2015) ("Where an intermediate court reviews, and affirms, a trial court's factual findings, this Court will not lightly overturn the concurrent findings of the two lower courts.") (internal quotation marks and citation omitted); *Exxon Co., U.S.A. v. Sofec, Inc.*, 517 U.S. 830, 841 (1996) (this Court "cannot undertake to review concurrent findings of fact by two courts below in the absence of a very obvious and exceptional showing of error") (internal quotation marks and citations omitted).

The State makes three arguments. First, it claims that "'[t]he injunction requires [it] to replace or repair all 817 culverts located in the [case] area . . . without regard to whether replacement of a particular culvert actually will increase the available salmon habitat'" because of other in-stream barriers. Pet. 29 (quoting App. 37a). That attack distorts the injunction beyond recognition. As explained above, *supra* at 14, the injunction divides WSDOT barrier culverts into high- and low-priority categories and imposes a correction deadline only for the former. All low-priority culverts, and up to 230 high-priority culverts designated by the State, must be remediated only when the State would do so anyway – at the end of the culvert's natural life,

or during a highway project that would otherwise require its replacement. App. 114a-116a.[6] Far from crafting an inflexible injunction, then, the district court accorded the State considerable discretion in choosing which culverts to remediate.

Second, the State claims that the injunction requires fish passage through culverts "without any evidence" that this will enhance salmon populations. Pet. 30. As detailed above, this claim is flatly contradicted by the district court's detailed findings, affirmed by the Court of Appeals, and by the State's own agencies with subject-matter expertise, on whose reports the district court's determinations largely hinged. *Supra* at 7-10. The State cannot simply wish away these findings and the record evidence on which they are based. Nor do annual fluctuations in the runs, despite stable culvert numbers, Pet. 30-31, prove that culverts are harmless – they merely show that natural variation is also at work.

The State criticizes only the Court of Appeals' citation to one particular piece of record evidence, the 1997 Task Force Report. Even if the criticism was warranted, it would say nothing about the numerous other documents relied upon by the district court, and it would hardly justify the writ. And while the State claims that "the district court – the factfinder –

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[6] The rehearing dissent misunderstands this point. The injunction does not simply provide the State "a longer schedule for replacing barriers that will open up less habitat." App. 40a. It allows the State to wait until the barriers would otherwise need replacement.

rejected the use of that report to predict 'lost' salmon as unreliable and never cited it in its findings of fact," Pet. 31, this is simply not true. *See* App. 147a, FF3.89.

In the wake of the report, state agencies other than WSDOT have acted to remediate their barrier culverts. *Id.*; *see also* App. 148a, FF3.90; App. 164a-166a. Those agencies have recognized that the exclusion of fish from 1,000 miles of spawning and rearing grounds has significantly harmed their populations. The district court did not err in so finding based on the overwhelming and largely stipulated evidence before it, and the Court of Appeals created no occasion for certiorari in affirming that conclusion.

Third, and finally, the State claims that the injunction works a "stark inequity" in requiring the State to pay the full cost of replacing culverts whose construction was partly supported with Federal Highway Administration grants, Pet. 31, and more generally that the district court failed "to consider the equities in fashioning relief," Pet. 32. As to the first point, the Court of Appeals aptly concluded that the district court was right to require the State to remedy its own violations of the Treaties, rather than continuing to hide behind purported authorizations from federal officials. "It was not an abuse of discretion to require the State to pay for correction of its own barrier culverts." App. 120a.

As to the broader point, the State again misstates the record. The district court carefully weighed the equities in fashioning its relief – it just did so in a way

that the State does not like. The court concluded that "[t]he balance of hardships tips steeply toward the Tribes in this matter." App. 177a, CL16; *see also* App. 120a-121a (affirming district court's conclusions). It relied on its findings, consistent with those affirmed in *Fishing Vessel*, that the promise of a sustained fishery "was crucial in obtaining [the Tribes'] assent to the Treaties' provisions," and reasoned that "[e]quity favors . . . keep[ing] the promises upon which the Tribes relied when they ceded huge tracts of land[.]" App. 177a, CL16.

As noted, the district court further found that the Tribes have suffered grave economic and cultural injury from the infringement of their treaty rights. App. 176a, CL14. By contrast, "[t]he State has the financial ability to accelerate the pace of barrier correction." App. 177a-178a, CL17. The court rejected the State's cost estimates for culvert removal as unsupported by, and significantly in excess of, the historical costs in the record, App. 170a, FF48, and concluded that the relevant cost is the marginal cost of more timely correction. App. 177a-178a, CL17. It further found that even the State's inflated cost claims would easily fit within WSDOT's budget, which exists separate from the State's general fund. *Supra* at 13-14; *see also* App. 171a, FF54; App. 172a-173a, FF57-60; App. 177a-178a, CL17. The Court of Appeals affirmed each of these findings after detailed examination, *see* App.

118a-120a, App. 122a-123a (quoting App. 172a, FF56), and the State does not challenge them here.[7]

> Finally, the court found:
>
> > The public interest will not be disserved by an injunction. To the contrary, it is in the public's interest, as well as the Tribes' to accelerate the pace of barrier correction. All fishermen, not just Tribal fishermen, will benefit from the increased production of salmon. Commercial fishermen will benefit economically, but recreational fishermen will benefit as well. The general public will benefit from the enhancement of the resource and the increased economic return from fishing in the State of Washington.

App. 178a, CL18. This finding is echoed in the strong support of non-Indian fishers for the Tribes' position in this litigation, 9th Cir. Dkt. 66-1 at 6-14, 17-20, and by the urging of the State's Commissioner of Public Lands, the statewide elected official who leads the WDNR, that the State's Attorney General not file a Petition for Certiorari but instead work with the Tribes to restore Washington's salmon fisheries. Tribal Respondents App. 1a.

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[7] Given the dismantling of its cost assertions by the courts below, the State does not directly argue cost as a basis for overturning the injunction. However, the State and its amici at various junctures reiterate, without substantiation, that the injunction will cost "billions [of] dollars." Pet. ii (Question Presented 3); Pet. 3. The State should not present as fact assertions roundly rejected by the courts below. Sup. Ct. R. 15(2).

Aside from its finger-pointing at federal officials, the only equities the State suggests the district court to have overlooked are the State's voluntary efforts to remediate culverts and restore salmon populations. Pet. 32. But far from ignoring or punishing these "good deed[s]," *id.*, the district court expressly considered them, finding that at the State's recent correction rate, and "assuming no new barrier culverts were to develop, it would take the State more than 100 years to replace the 'significantly blocking' WSDOT barrier culverts that existed in 2009," App. 163a, FF28. Indeed, because of the continued deterioration of culverts, the court found there had been an "increase in the total number of WSDOT barrier culverts" from 2009 to 2012, App. 164a, FF29, "*lead[ing] to the untenable conclusion that under the current State approach, the problem of WSDOT barrier culverts in the Case Area will never be solved.*" App. 164a, FF31 (emphasis added). In light of these uncontested findings, and the likewise undisputed fact that various "stocks of native salmon have become so depleted that the species is listed as threatened or endangered," App. 175a, CL8, the district court properly concluded that an injunction is necessary. App. 179a, CL20. Indeed, it is fair to say that any decision that would instead leave in place the State's patently inadequate approach to culverts remediation would threaten to render the Tribes' treaty rights, and the salmon on which they depend, little more than a distant memory.

The district court's fact-intensive analysis of the equities hardly constitutes an abuse of discretion, let alone one warranting issuance of the writ.

IV. THE STATE'S ATTEMPT TO SOW FEARS ABOUT FUTURE DECISIONS DOES NOT TRANSFORM THE NARROW HOLDING BELOW INTO ONE DESERVING OF REVIEW BY THIS COURT.

The State and its amici argue that the decision below is exceptionally important – not because of what it says, but because of what it does not. Cherry-picking the statements of a few commentators, and echoing the rehearing dissent, the State claims that "[t]he panel opinion fails to articulate a limiting legal principle that will prevent its holding from being used to attack a variety of development, construction, and farming practices, not just in Washington but throughout the Pacific Northwest." Pet. 33 (quoting App. 19a). But the Court of Appeals could not have been clearer about the narrow scope of its decision: "We hold only that the State violated the Treaties when it acted affirmatively to build roads across salmon bearing streams, with culverts that allowed passage of water but not passage of salmon." App. 10a-11a; *see also* App. 178a, CL19 (district court) ("The State's duty to maintain, repair or replace culverts which block passage of anadromous fish does not arise from a broad environmental servitude. . . . Instead, it is a narrow and specific treaty-based duty that attaches when the State elects to block

rather than bridge a salmon-bearing stream with a roadbed.").

The State faults the Court of Appeals for not specifying other state actions that might or might not violate the Stevens Treaties. This is remarkable. As noted, the Phase II district court announced a broad definition of the State's environmental responsibilities under the Treaties, applicable to all state activities. The State appealed, arguing that this was tantamount to an environmental servitude. While underscoring that the State is bound by the Treaties, an en banc panel of the Ninth Circuit, including then-Judge Kennedy, agreed that the district court had swept too far, and held that the precise measure of the State's duties should be delineated in litigation over particular state actions. *Supra* at 12.

That is exactly what happened here. The Tribes brought a clear set of facts to court on a narrow issue involving one specific state practice – maintaining culverts in streams that directly impede salmon passage and break their anadromous life cycle. The courts below found that one practice to violate the State's duties under the Treaties, and their carefully circumscribed remedy focused entirely on it.

This was an appropriate, conservative exercise of the judicial function. The Court of Appeals, as it properly recognized, was not sitting as a super-legislature with the authority to address all manner of situations other than the one before it:

> Cabining our opinion by means other than a careful, detailed description of the facts presented would have entailed positing hypothetical facts in cases not before us and giving an improper advisory opinion. . . . Other cases with different facts might come out differently, but we did not decide – and should not have decided – such cases.

App. 12a. The Court of Appeals, in other words, did not "[f]ashion[] itself as a twenty-first century environmental regulator," App. 17a, but rather as a court, resolving a specific dispute based on facts adduced by the parties.

The dispute here was over the blocking of streams and the pace of culvert corrections. It was not a dispute over other activities that may not affect fish to the same extent, or in the same direct and indisputable way; that may not be as inconsistent with treaty-time understandings, or remedied as easily with so little effect on modern life; or that may never come before the courts. It was resolved by reading the Treaty text in the manner required by seven prior decisions of this Court, and in conjunction with extensive and well-documented historical, technical, and biological findings of fact, many of them coming from the State itself. The result conflicts with no appellate precedent and raises no issue of such prevalence and importance as to warrant this Court's review.

CONCLUSION

The petition should be denied.

Respectfully submitted this 27th day of November, 2017.

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No. 17-269

In The
Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.

Respondents.

ON PETITION FOR A WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

REPLY TO BRIEFS IN OPPOSITION

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REPLY BRIEF FOR PETITIONER

Attempting to avoid this Court's review, Respondents claim the opinion below is consistent with precedent and narrowly prohibits the State of Washington from "destroying" salmon fisheries and abrogating treaty rights. These claims cannot withstand scrutiny.

The Ninth Circuit opinion is not a narrow restriction on "destroying" salmon runs. If it were, Washington would not have sought certiorari. Salmon are vital to our State's people, culture, and economy. In reality, the panel held that the Treaties make a promise beyond the State's control: "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a. This Court rejected that unworkable rule in *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658 (1979) (*Fishing Vessel*).

Respondents similarly err in claiming that Washington's equitable defenses would abrogate treaty rights. As this Court recognized in *City of Sherrill v. Oneida Indian Nation*, 544 U.S. 197, 213 (2005), equitable defenses address what relief is available, not what rights exist. And as this Court and the Second Circuit have recognized, such defenses are available in treaty cases. The Ninth Circuit disagreed, rejecting these holdings and the powerful equities here, where the federal government designed and granted permits for the very culverts it now claims violate treaties it signed 160 years ago.

Finally, Respondents' attempt to reconcile the injunction here with precedent fails. Respondents cannot dispute that the injunction requires the State

to replace many culverts that will make no difference, flying in the face of federalism principles.

The Court should grant certiorari.

I. Respondents Mischaracterize the Ninth Circuit's Opinion

To minimize the conflict with *Fishing Vessel* and the importance of this case, Respondents mischaracterize the Ninth Circuit's opinion in two crucial respects.

First, Respondents claim that the Ninth Circuit's opinion narrowly "addressed whether the Treaties place any limits on the State's ability to destroy the fisheries that form the Treaty *res*, and held that they do." Tribes BIO at 17; *id.* at 18; U.S. BIO at 14. If that were all that the panel held, this case would be as unimportant as Respondents claim. Indeed, the Ninth Circuit held 40 years ago that "neither the treaty Indians nor the state on behalf of its citizens may permit the subject matter of these treaties to be destroyed." *United States v. Washington*, 520 F.2d 676, 685 (9th Cir. 1975). The State has made clear that it has no objection to that rule. Ninth Circuit Oral Argument at 50:20 to 51:10 (Oct. 16, 2015), http://www.ca9.uscourts.gov/media/view_video.php?pk_vid=0000008307.

But that is not what the Ninth Circuit held. It held that the Treaties "promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a; U.S. BIO at 13 (admitting that the panel held that Washington "violates the treaty fishing right by interfering with the Tribes' ability to ensure a moderate living").

There are crucial differences between what Respondents claim the Ninth Circuit held (a guarantee against fishery destruction) and what it actually held (a guaranteed moderate living). Most importantly, as detailed below, an anti-destruction principle could be reconciled with *Fishing Vessel*, while the moderate-living guarantee cannot. An anti-destruction rule would also lead to a very different test for treaty violation from the one the courts below applied. Rather than simply concluding that Tribes are not earning a moderate living from fishing and that culverts play some unknown part in that, the courts below would have needed to consider whether the State destroyed the salmon fishery or particular salmon runs by building culverts, given factors like: (1) the State built culverts to standards that the federal government said were sufficient to allow streams to pass through and comply with federal law; (2) Respondents' highest estimate of salmon affected by state culverts (200,000) is a small fraction of annual harvests even in recent times (e.g., less than 5% of the 4 million salmon harvested in 2003, ER 267), and an even smaller percentage of historic harvests; (3) state culverts are vastly outnumbered by non-State culverts, including federal culverts, Pet. App. 203a, ER 196-209, 407-555; and (4) salmon runs had declined dramatically long before the State built any culverts, *see, e.g.*, *Vail v. Seaborg*, 207 P. 15, 16 (Wash. 1922) ("It is a well-known fact that the salmon industry of the state is rapidly disappearing.").

Respondents' second mischaracterization is that the Ninth Circuit's opinion makes clear that it addresses only culverts, so it will not have the far-reaching impacts the State and amici describe. *See,*

e.g., Tribes BIO at 36 ("[T]he Court of Appeals could not have been clearer about the narrow scope of its decision[.]"); U.S. BIO at 13-14, 19-20. But every passage Respondents cite to support this proposition comes from the concurrence in denial of rehearing en banc authored by two panel members—not the opinion. *See, e.g.*, Tribes BIO at 36 (citing Pet. App. 10a-11a); U.S. BIO at 13-14 (citing Pet. App. 10a-11a); U.S. BIO at 20 (citing Pet. App. 11a-12a). And when Respondents or others file the next case based on the panel's opinion, they will surely argue that the concurrence in denial of rehearing "is not a means by which [the Ninth Circuit] can definitively speak on legal questions." *Hughes v. Kisela*, 862 F.3d 775, 797 (9th Cir. 2016), *as amended* (June 27, 2017) (Ikuta, J., dissenting from denial of rehearing en banc) (citing *EEOC v. Bass Pro Outdoor World, LLC*, 865 F.3d 216, 234 (5th Cir. 2017) (Jones, J., dissenting from denial of rehearing en banc) ("[T]he panel has only the right to comment on the dissent from denial, not to articulate *any* additional binding precedent."); *Young v. Borders*, 850 F.3d 1274, 1287 (11th Cir. 2017) (Hull, J., concurring in denial of rehearing en banc) ("[O]rders denying rehearing en banc, even this published one, have no binding or precedential value.").

The panel could have amended its opinion to address the concerns of the State and the dissent that the opinion contained no "limiting legal principle that will prevent its holding from being used to attack a variety of development, construction, and farming practices . . . throughout the Pacific Northwest." Pet. App. 19a. The panel chose not to do that (despite making other amendments on rehearing), instead

issuing a concurrence in the denial of rehearing en banc. The Court should see through the panel's (and Respondents') efforts to downplay the opinion's scope.

Subsequent events support the State's concern about the opinion's breadth and the need for this Court's review. For example, the EPA "cited the Ninth Circuit culvert decision as a basis for disapproving some of Washington State's water quality standards under the Clean Water Act" and Maine's water quality standards.[1] And the commission that regulates land use in the Columbia River Gorge under 16 U.S.C. §§ 544-544p, relied on the panel decision to uphold the denial of a railroad's land-use permit in Oregon.[2]

In short, Respondents' attempts to narrow the opinion ring hollow, failing to undermine the exceptional importance of this case.

II. The Conflict with *Fishing Vessel* Is Real

The Ninth Circuit ruled that the Treaties "promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a. This is irreconcilable with *Fishing Vessel*, which specifically rejected the Tribes' argument "that the treaties had reserved a pre-existing right to as many fish as their commercial

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[1] Conference of Western Attorneys General, *American Indian Law Deskbook* § 9:18, 674-76 & nn.28, 31-32 (2017).

[2] *Union Pac. R.R. Co. v. Wasco County Bd. of Comm'rs*, No. COA-16-01, at 32-47 (Columbia River Gorge Comm'n Sept. 8, 2017), http://www.gorgecommission.org/images/uploads/appeals/20170908_Final_Opinion_and_Order_%2816-01%2C_16-02_%28Consolidated%29%29.pdf, *appeal docketed*, No. A166300 (Or. Ct. App. Nov. 7, 2017).

and subsistence needs dictated." *Fishing Vessel*, 443 U.S. at 670.

To avoid the conflict, Respondents first rewrite *Fishing Vessel*. They claim the Court recognized a "right" to as many fish as the Tribes need for a moderate living, subject to a "ceiling" of 50% of the available fish. U.S. BIO at 13; Tribes BIO at 19-20. This reverses the opinion and conflates the right with the remedy. *Fishing Vessel* declared "a *right*, secured by treaty, *to take a fair share of the available fish*." *Fishing Vessel*, 443 U.S. at 684-85 (emphasis added). The Court then turned to the remedy, affirming an equitable apportionment of 50% of the catch to the Tribes unless "tribal needs may be satisfied by a lesser amount." *Id.* at 685-86. Thus, rather than declaring a right to a "moderate living," the Court declared a right to a fair share, capped at 50%. If a lesser share were sufficient to "provide the Indians with a livelihood—that is to say, a moderate living," their share could be reduced. *Id.* at 686-87. Thus, as the Tribes themselves admit, *Fishing Vessel* used the moderate living "standard to bound the tribal share" of the catch, not to declare a minimum guarantee. Tribes BIO at 20. By contrast, "the panel opinion turns *Fishing Vessel* on its head" by "impos[ing] an affirmative duty upon the State to provide a certain quantity of fish[.]" Pet. App. 24a.

Next, Respondents claim that the panel needed to read *Fishing Vessel* to guarantee a moderate living because otherwise the State could "entirely eliminate the supply of harvestable salmon." U.S. BIO at 14 (quoting Fletcher, J., concurring in the denial of rehearing en banc, Pet. App. 9a). Judge O'Scannlain properly described this theory as "utter nonsense."

Pet. App. 28a. Courts have equitable powers to protect the shared salmon fishery from waste, overfishing, or destruction. *See Fishing Vessel*, 443 U.S. at 692 n.32; *United States v. Washington*, 520 F.2d at 685 ("[N]either the treaty Indians nor the state on behalf of its citizens may permit the subject matter of these treaties to be destroyed."); *United States v. Oregon*, 657 F.2d 1009, 1015-16 (9th Cir. 1981). Countless other state and federal laws protect salmon, and the State has strong incentives to preserve and restore salmon runs to benefit all Washingtonians, evidenced by the State's voluntary expenditure of hundreds of millions of dollars on salmon recovery.

The Tribes also claim there is no conflict because *Fishing Vessel* left "open" "whether the Treaties place any limits on the State's ability to destroy the treaty fisheries." Tribes BIO at 18. It is true that *Fishing Vessel* did not specifically address that question. But the Ninth Circuit's holding is not limited to that question. The court held the Treaties "promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a. That rationale is irreconcilable with *Fishing Vessel*, which rejected that very principle. *Cf. Seminole Tribe of Florida v. Florida*, 517 U.S. 44, 67 (1996) ("When an opinion issues for the Court, it is not only the result but also those portions of the opinion necessary to that result by which we are bound.").

III. The Ninth Circuit's Rejection of Equitable Defenses in Treaty Cases Creates a Real Conflict

Despite this Court's holding in *City of Sherrill v. Oneida Indian Nation*, 544 U.S. 197 (2005)

(*Sherrill*), that equitable defenses are available to treaty claims, the Ninth Circuit adhered to its own prior precedent holding the opposite. Pet. App. 97a-98a. Respondents fail in their attempts to distinguish *Sherrill* and Second Circuit cases applying it.

Respondents first argue that equitable defenses cannot be available to treaty claims because only Congress can abrogate treaty rights. U.S. BIO at 21; Tribes BIO at 26. But equitable defenses do not abrogate treaty rights. As this Court explained in *Sherrill*, equitable defenses are rooted in the idea that even if a right exists, the remedies available may be limited. *Sherrill*, 544 U.S. at 213. And *Sherrill* and subsequent Second Circuit cases have applied equitable defenses to bar analogous treaty claims.

Next, Respondents claim *Sherrill* is distinguishable because it did not address "specific rights" created by Treaties. U.S. BIO at 22. Not so. The tribe's claim in that case was that it was exempt from tax on property within its "reservation set aside by the 1794 Canandaigua Treaty." *Sherrill*, 544 U.S. at 212; *see also id.* at 203-05. Although it was undisputed that the land at issue was within the treaty reservation, the Court held that equitable considerations barred the tribe's claim. *Id.* at 213-20.

Respondents also point out that the federal government was not a party to *Sherrill*. Tribes BIO at 27; U.S. BIO at 22. But Respondents never explain why this matters, especially given that the United States appeared as amicus in *Sherrill* to support the tribe. Nor does this lessen the circuit conflict—the United States was party to Second Circuit cases applying equitable defenses. *See Oneida Indian*

Nation v. Cty. of Oneida, 617 F.3d 114 (2d Cir. 2010), *cert. denied*, 565 U.S. 970 (2011); *Cayuga Indian Nation v. Pataki*, 413 F.3d 266 (2d Cir. 2005), *cert. denied*, 547 U.S. 1128 (2006).

Next, Respondents assert that this case differs factually from *Sherrill* and the Second Circuit cases, which involved "long-moribund sovereignty" over land held by others. U.S. BIO at 22-23; Tribes BIO at 27. But these arguments go to whether the State's equitable defenses should prevail on the merits, not whether the State can raise these defenses at all. Here, the district court dismissed the State's defenses as a matter of law at the pleading stage, Pet. App. 273a-74a, and the Ninth Circuit affirmed that decision, creating a clear conflict.

These factual distinctions are also weak. *Sherrill* and the Second Circuit cases all involved claims within a tribe's historic reservation lands. *Sherrill*, 544 U.S. at 212; *Oneida Indian Nation*, 617 F.3d at 119. By contrast, Respondents here seek to regulate State actions outside of reservations in areas where the Tribes "cede[d], relinquish[ed], and convey[ed] . . . all their right, title, and interest in and to the lands." Treaty with the Nisqualli, Puyallup Etc. 1854 (Medicine Creek Treaty), arts. I, III, 10 Stat. 1132, 1133 (Dec. 26, 1854, ratified Mar. 3, 1855, proclaimed Apr. 10, 1855). If anything, such claims threaten to be more disruptive than claims to reservation lands. And if equity can limit a treaty claim to reservation land itself, surely it can limit other types of claims.

Finally, Respondents claim that this case differs because the Treaties here have been the

subject of litigation for over a century. But the same was true in *Sherrill*, where litigation seeking compensation for the tribe's lost land began in 1893. *Sherrill*, 544 U.S. at 207. And the history of litigation over these Treaties actually supports the availability of equitable defenses here. At least since *United States v. Winans*, 198 U.S. 371 (1905), and throughout subsequent decades, the federal government has brought many cases to enforce the Stevens Treaties. Yet at the exact same time, the federal government was encouraging and funding Washington's highway construction and directing the State's culvert design.[3] Even after this case was filed in 1970, the federal government continued to issue permits for culverts in Washington, saying that they complied with federal law. ER 990. Given that the federal government spent decades suing to enforce the Treaties while simultaneously providing the design and permits for the State's culverts, the State's reliance interests are clear. *Cf. Sherrill*, 544 U.S. at 217 ("It is well established that laches, a doctrine focused on one side's inaction and the other's legitimate reliance, may bar long-dormant claims for equitable relief.").

IV. The Injunction is Irreconcilable with This Court's Precedent

The United States claims that normal principles of injunctive relief—that injunctions be narrowly tailored to redress only conduct that violates

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[3] The federal government was also building dams in areas covered by the Treaties that completely or partially blocked salmon runs. *See, e.g., Wild Fish Conservancy v. Salazar*, 628 F.3d 513, 516-17 (9th Cir. 2010); *Idaho ex rel. Evans v. Oregon*, 462 U.S. 1017, 1020-21 & nn.2-5 (1983).

federal law, issued only after considering public impacts, and shaped with due regard for federalism—do not apply to treaty claims, and that the only relevant precedent is *Fishing Vessel*. U.S. BIO at 25-26. But *Fishing Vessel* announced no different standard and upheld an injunction carefully designed to implement the treaty right to a fair share of available fish. *United States v. Washington*, 384 F. Supp. 312, 413 (W.D. Wash. 1974); *see Fishing Vessel*, 443 U.S. at 685-89. By contrast, the injunction here is not narrowly tailored to prevent "destruction" of salmon or even to implement the "moderate living" right declared by the Ninth Circuit. Pet. App. 94a. As Judge O'Scannlain noted, the injunction forces the State to replace hundreds of culverts "without regard to whether replacement of a particular culvert actually will increase the available salmon habitat." Pet. App. 37a.

Neither Respondent disputes this. The United States excuses this overbroad injunction by claiming that the district court followed the State's own prioritization methodology. U.S. BIO at 24. Not so. The district court criticized and rejected the State's prioritization, Pet. App. 169a-70a, and substituted its own, Pet. App. 237a. It gave equal priority to all culverts that have "200 lineal meters or more of salmon habitat upstream to the first natural passage barrier," Pet. App. 237a, regardless of whether other barriers prevent salmon from getting to the culvert, and regardless of cost, Pet. App. 247a.

Finally, Respondents claim the State has inflated the injunction's costs. U.S. BIO at 25; Tribes BIO at 33. The State has been living under the injunction for four years, and during that time,

removing and replacing highway culverts to the standard the district court ordered has averaged several million dollars per culvert.[4] Even if just a fraction of the hundreds of culverts the injunction orders replaced have no impact, tens of millions of state dollars will be wasted.

CONCLUSION

The Ninth Circuit's opinion conflicts with decisions of this Court and others and imposes massive, ill-defined burdens on the State of Washington. This Court should grant certiorari.

RESPECTFULLY SUBMITTED.

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[4] *See WSDOT Fish Passage Performance Report* 30-31 (June 30, 2017), http://www.wsdot.wa.gov/publications/fulltext/projects/FishPassage/2017FishPassageAnnualReport.pdf (construction costs for projects from 2013-2016).

RECORD
AND
BRIEF

No. 17-269

In the Supreme Court of the United States

STATE OF WASHINGTON, PETITIONER

v.

UNITED STATES OF AMERICA, ET AL.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

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In the Supreme Court of the United States

No. 17-269

STATE OF WASHINGTON, PETITIONER

v.

UNITED STATES OF AMERICA, ET AL.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

BRIEF FOR BUSINESS, HOME BUILDING, REAL ESTATE, FARMING, AND MUNICIPAL ORGANIZATIONS AS AMICI CURIAE SUPPORTING PETITIONER

INTEREST OF AMICI CURIAE*

Amici are organizations that represent businesses, home builders, real-estate professionals, farmers, and

* No counsel for a party authored this brief in whole or in part, and no person other than amici, their members, or their counsel has made a monetary contribution intended to fund the preparation or submission of the brief. Amici timely notified all parties of their intention to file this brief, and letters of consent from all parties to the filing of this brief are on file with the Clerk.

municipalities in Washington State and around the country.

The Association of Washington Business (AWB) is Washington State's Chamber of Commerce and the principal representative of the State's business community. AWB is the State's oldest and largest general business membership federation, representing the interests of approximately 8000 Washington companies who, in turn, employ more than 700,000 employees, approximately a quarter of the State's workforce. AWB's members are located in all areas of Washington, represent a broad array of industries, and range in size from sole proprietorships to large corporations that do business around the world.

The National Association of Home Builders (NAHB) is a Washington, D.C.–based trade association whose mission is to enhance the climate for housing and the building industry. Founded in 1942, NAHB is a federation of more than 700 state and local associations. About one-third of NAHB's approximately 140,000 members are home builders or remodelers, and they account for 80% of all homes constructed in the United States.

The Building Industry Association of Washington is the State's association of home builders and related companies that provide products and services for residential building construction and remodeling. It has 7500 members across the State.

The Montana Building Industry Association is a trade association founded in 1968 to promote and protect the building industry. It represents approximately 1500 builders and affiliated small business and nine local associations throughout Montana.

The Oregon Home Builders Association is the voice of Oregon's residential and light commercial construction industry. It has nearly 3000 member companies representing more than 196,000 jobs and over $3 billion in the Oregon economy.

The Master Builders Association of King and Snohomish Counties is a trade organization of professional home builders and related professionals. With nearly 2800 member companies from all facets of housing construction, it is the largest local home builders' association in the United States.

Washington REALTORS® is a trade association of approximately 20,000 licensed real-estate brokers. It represents their interests, and those of Washington's homeowners and businesses, on a variety of issues affecting residential and commercial real estate.

The Washington State Farm Bureau is a voluntary, grassroots advocacy organization representing the social and economic interests of farm and ranch families in Washington State. It includes more than 47,000 member families.

The Idaho Farm Bureau Federation is a non-profit organization representing approximately 76,000 Idaho families. Its members live and work in each of Idaho's 44 counties and represent all commodities grown in Idaho; it includes a substantial number of livestock producers who graze on public lands.

The Montana Farm Bureau Federation is the State's largest agricultural organization, representing 30 county farm bureaus. It provides a voice for agricultural producers in legislative, legal, and other areas affecting agriculture.

The Oregon Farm Bureau is a grassroots advocacy organization founded in 1919 to represent the social and economic interests of Oregon's farming and ranching families in the public policy arena. It has farming and ranching members in all 36 Oregon counties, with a total of 65,000 member families statewide.

The Association of Washington Cities is a private non-profit corporation that represents Washington's cities and towns before the State Legislature, the State Executive branch, and regulatory agencies. Membership is voluntary, but the association includes all of Washington's 281 cities and towns.

This case presents the question whether treaties providing Indians in the Pacific Northwest the "right of taking fish, at all usual and accustomed grounds and stations" also guarantee "that the number of fish [will] always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a (quoting *Washington* v. *Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 686 (1979) (*Fishing Vessel*)). The Ninth Circuit answered that question in the affirmative. In so holding, it affirmed a sweeping injunction compelling the State of Washington to remove or replace highway culverts that allegedly impair salmon habitat and reduce the number of salmon available for tribal fishing. The court's reasoning is not confined to culverts but will affect land-use and water-allocation decisions throughout the West. Amici therefore have a significant interest in the resolution of this case.

SUMMARY OF ARGUMENT

The Ninth Circuit affirmed an injunction compelling the State of Washington to spend billions of dollars removing or altering highway culverts in order to facilitate the migration of salmon. It did so based on treaties that guarantee Indian tribes the "right of taking fish, at all usual and accustomed grounds and stations." Adopting an interpretation ungrounded in the text of the treaties, the court concluded that Indian tribes enjoy a guarantee "that the number of fish [will] always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a (quoting *Fishing Vessel*, 443 U.S. at 686).

The decision below is not only wrong but also extraordinarily important. Tribes in several other States enjoy treaty rights similar to those construed in this case. And while the decision below is nominally limited to highway culverts, its reasoning is far broader. If tribes have a right to ensure that States maintain a particular number of fish for tribal interests, then few activities in the West will escape judicial superintendence at the behest of tribes. Culverts, after all, are not the only human activity that can harm salmon. Almost all land-use decisions affect fish habitat directly or indirectly, as does the withdrawal of surface or underground water under state-law water rights regimes.

While some adverse effects of the Ninth Circuit's decision will become apparent only in future litigation, others will be felt immediately. The court ordered the removal or modification of culverts that have been in place for many years. Anyone undertaking development that might affect fish habitat must now confront

the possibility that the court's decision will be applied to require that the development be altered. The decision thus creates uncertainty that will inhibit development throughout the West. It warrants immediate review and correction by this Court.

ARGUMENT

A. The Ninth Circuit erred in holding that Washington's culverts impair the fishing right guaranteed by the treaties

This case involves the interpretation of treaties that Territorial Governor Isaac Stevens negotiated on behalf of the United States with Indian tribes in the Pacific Northwest in 1854 and 1855. See generally *Fishing Vessel*, 443 U.S. at 666-667. All of the treaties contain similar clauses providing that "[t]he right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory." Treaty with the Nisqually, art. 3, Dec. 26, 1854, 10 Stat. 1133.

The Ninth Circuit held that "[t]he Indians reasonably understood Governor Stevens to promise not only that they would have access to their usual and accustomed fishing places, but also that there would be fish sufficient to sustain them." Pet. App. 92a. The court therefore "infer[red] a promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." *Id.* at 94a (quoting *Fishing Vessel*, 443 U.S. at 686). Because the State's decision "to build and maintain barrier culverts under its roads" had "diminish[ed] the supply of fish," the court concluded that "in building and maintaining barrier culverts * * * Washington has violated, and is continuing to

violate, its obligation to the Tribes under the Treaties." *Id.* at 95a-96a. That conclusion is contrary to the language of the treaties, and it finds no support in this Court's decisions.

1. The Ninth Circuit's interpretation cannot be reconciled with the text of the treaties, which guarantee a "right of taking fish." In the 19th century, "take," as applied to wild animals, had the same meaning it does today: "to get possession of (as fish or game) by killing or capturing." *Webster's Third New International Dictionary of the English Language* 2330 (1976); see also *Geer* v. *Connecticut*, 161 U.S. 519, 523 (1896); 2 William Blackstone, *Commentaries* 411 (1766). The treaties thus protect the ability to engage in the act of catching fish, an act that necessarily occurs at a particular place. By protecting the right to fish in "all usual and accustomed grounds and stations," the treaties guarantee access to those places for the purposes of fishing. Treaty with the Nisqually, art. 3, 10 Stat. 1133. In doing so, they "impose[] a servitude upon every piece of land as though described therein," allowing Indians to access or occupy private property as necessary to fish at traditional fishing grounds, regardless of the ownership of those grounds. *United States* v. *Winans*, 198 U.S. 371, 381-382 (1905); see also *Seufert Bros. Co.* v. *United States*, 249 U.S. 194, 199 (1919). Nothing in that right, which is tied to particular locations, suggests a power to regulate the non-fishing activities of the State in other locations.

Notably, the language of the Stevens Treaties is similar to that of earlier international treaties guaranteeing fishing rights. For example, the 1783 Treaty of Paris provided "that the people of the United States

shall continue to enjoy unmolested the right to take fish of every kind on the Grand Bank, and on all the other banks of Newfoundland." Treaty of Paris, art. 3, Sept. 3, 1783, 8 Stat. 82; see also Convention with Great Britain, art. 1, Oct. 20, 1818, 8 Stat. 248. Those provisions have not been construed to restrict British activities elsewhere.

If there were any doubt on the point, it would be resolved by examining Article I of the Stevens Treaties, under which the tribes "cede[d], relinquish[ed], and convey[ed] to the United States *all their right, title, and interest* in and to the lands and country occupied by them." Treaty with the Nisqually, art. 1, 10 Stat. 1132 (emphasis added). If the "right of taking fish" dictates how States are to manage road construction on State land, then the cession, relinquishment, and conveyance could not reasonably be said to include "all the right, title, and interest" the Indians had to the ceded lands.

2. The Ninth Circuit's interpretation also fails to take account of the treaties' language specifying that the right to fish is "in common with all citizens of the Territory." Treaty with the Nisqually, art. 3, 10 Stat. 1133. This Court has held that the common right of fishery is a public right, subject to the regulation of the State. See, *e.g.*, *Martin* v. *Waddell's Lessee*, 41 U.S. (16 Pet.) 367 (1842); *Smith* v. *Maryland*, 59 U.S. (18 How.) 71 (1855); see also *Tarrant Reg'l Water Dist.* v. *Herrmann*, 133 S. Ct. 2120, 2132 (2013) (noting that the "power to control navigation, fishing, and other public uses of water, 'is an essential attribute of sovereignty'") (quoting *United States* v. *Alaska*, 521 U.S. 1, 5 (1997)). Thus, the Court has "repeatedly reaffirmed

state authority to impose reasonable and necessary nondiscriminatory regulations on Indian hunting, fishing, and gathering rights in the interest of conservation." *Minnesota* v. *Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 204-205 (1999).

This Court has interpreted the Stevens Treaties to permit States to regulate the off-reservation fishing activity of Indians in order to preserve fish resources. See *Puyallup Tribe* v. *Department of Game of Washington*, 391 U.S. 392, 399 (1968). In so holding, the Court stated that "the manner of fishing, the size of the take, the restriction of commercial fishing, and the like may be regulated by the State in the interest of conservation, provided the regulation meets appropriate standards and does not discriminate against the Indians." *Id.* at 398. More recently, in *Fishing Vessel*, the Court read the treaties to "secure the Indians' right to take a share of each run of fish that passes through tribal fishing areas." 443 U.S. at 679. It ultimately concluded that the tribal share can be no more than 50%, subject to modification based on changing circumstances. *Id.* at 686-687.

Even in *Fishing Vessel*, however, the Court merely read the treaties to guarantee "a share of each run of fish." 443 U.S. at 679. It did not hold that the State must ensure that each run has a particular number of fish in it; still less did it interpret the treaty language to impose an obligation on the State to regulate activities unrelated to fishing in a certain manner because of effects on fishing. The treaty language does not permit such a construction.

3. The court of appeals made little effort to reconcile its interpretation with the text of the treaties. In-

stead, it emphasized that a court construing an Indian treaty must "look beyond the written words to the larger context that frames the [t]reaty, including 'the history of the treaty, the negotiations, and the practical construction adopted by the parties." Pet. App. 89a (quoting *Mille Lacs Band of Chippewa Indians*, 526 U.S. at 196); accord *Fishing Vessel*, 443 U.S. at 675-676 (Treaties are to "be construed * * * in the sense in which they would naturally be understood by the Indians.") (quoting *Jones* v. *Meehan*, 175 U.S. 1, 11 (1899)). But there are limits to how generously treaty language may be read. This Court has held that "even Indian treaties cannot be re-written or expanded beyond their clear terms to remedy a claimed injustice or to achieve the asserted understanding of the parties." *Choctaw Nation* v. *United States*, 318 U.S. 423, 432 (1943). The court of appeals erred by doing just that.

B. The Ninth Circuit's decision will have widespread and significant consequences

The Ninth Circuit panel stated its holding in superficially narrow terms: "[W]e conclude that in building and maintaining barrier culverts Washington has violated, and continues to violate, its obligation to the Tribes under the fishing clause of the Treaties." Pet. App. 126a. And in the order denying rehearing, two judges from the panel described the court's decision as "[c]abin[ed] * * * [by] a careful, detailed description of the facts presented." *Id.* at 12a (W. Fletcher, J., and Gould, J., concurring in the denial of rehearing en banc). But the court's reasoning is in no way limited to that factual context, and the consequences of the decision will extend far more broadly.

As an initial matter, the effect of the decision below is unlikely to be limited to Washington. Tribes located in Oregon and Idaho negotiated treaties with substantially the same language. See Treaty with the Indians in Middle Oregon, art. 1, June 25, 1855, 12 Stat. 964; Treaty with the Nez Percés, art. 3, June 11, 1855, 12 Stat. 957; Treaty with the Walla-Wallas, art. 1, June 9, 1855, 12 Stat. 946. In Montana, the Confederated Salish and Kootenai Tribes of the Flathead Reservation also reserved "the right of taking fish at all usual and accustomed places," as well as "the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land." Treaty with the Flatheads, art. 3, July 16, 1855, 12 Stat. 976. The underlying principle of the decision below—that States cannot engage in (or fail to remediate) activities that have the effect of diminishing fish populations—will affect those States as well.

In the affected States, the Ninth Circuit's decision will affect far more than just culverts. The decision also threatens to displace state regulation of land use and water rights.

1. **Land use**

The Ninth Circuit focused on the role of barrier culverts in diminishing fish runs. Pet. App. 95a. Barrier culverts, however, are not the only obstacle to sustaining anadromous fish populations. Many human activities affect salmon runs. The U.S. Fish and Wildlife Service has determined that "[t]he biggest threat to salmon today is the loss and degradation of habitat." U.S. Fish & Wildlife Service, *Salmon of the West: Why are Salmon in Trouble?—Poor Habitat*, http://

www.fws.gov/salmonofthewest/poorhabitat.htm. The decision below will therefore have implications for every land use or development decision that could affect salmon habitat. That includes almost all development decisions, for as the Washington State Conservation Commission (WSCC) has explained, "[r]iparian zones are impacted by all types of land use practices." Carol J. Smith, Washington State Conservation Commission, *Salmon Habitat Limiting Factors in Washington State* 127 (2005), http://docs.streamnetlibrary.org/Washington/ConservationCommission/Statewide_LFA_Final_Report_2005.pdf. For example, the WSCC has determined that "[r]iparian functions are impaired by * * * direct removal of riparian vegetation, roads and dikes located adjacent to the stream channel, road crossings, agricultural/livestock crossings, unrestricted livestock grazing in the riparian zone, and development in the riparian corridor." *Ibid.* In addition, salmon can be harmed by "[h]uman-caused alterations in basin hydrology" resulting from "changes in soils, decreases in the amount of forest cover, wetlands, and riparian vegetation, and increases in impervious surfaces, sedimentation, and roads." *Id.* at 174. Thus, according to the WSCC, "[h]ydrologic impacts to stream channels can occur at relatively low levels of development." *Ibid.*

Federal, state, and local governments currently regulate development projects. During the permitting process, they require compliance with a host of environmental and land-use laws; thereafter, they require proper mitigation of environmental impacts. For example, the Clean Water Act prevents developers from dredging or filling navigable waters and wetlands

without a permit and requires them to obtain permits for their stormwater runoff. 33 U.S.C. 1342(p), 1344. Washington State requires local governments to make land-use decisions based on adopted policies aimed at preventing or reducing impacts to fish habitats from development in critical areas or along shorelines. See, *e.g.*, Wash. Rev. Code §§ 36.70A.030(5), 36.70A.060(2) (requiring counties and cities to develop policies and development regulations to protect critical areas, including fish habitat); *id.* § 90.58.080 (directing local governments to develop shoreline master programs to regulate shoreline use and modification); Wash. Admin. Code § 173-26-201(2)(c) (discussing importance of ecological functions of shorelines, particularly for anadromous fish, in development of shoreline master programs); *id.* § 173-26-231(2)(d) (requiring local governments to "assure that shoreline modifications individually and cumulatively do not result in a net loss of ecological functions," including fish habitat).

The Ninth Circuit's decision adds another layer of requirements—compliance with treaty rights—to the demands of federal and state law. Despite significant federal, state, and local regulation, the vast majority of land-development activities will affect stream flows, water quality, or salmon habitat to some extent by altering the natural state of the environment. Under the reasoning of the court below, those activities therefore have the potential to infringe a tribe's treaty right to enough fish to sustain a "moderate living," especially if they are assessed on a cumulative basis. Because the Ninth Circuit articulated no standards to limit the treaty right it identified, the extension of its decision to land-use regulation will be limited by little

but the creativity of regulators and tribal plaintiffs and the equitable discretion of the district court.

2. Water rights

The Ninth Circuit's decision will also affect the diversion of surface water and the withdrawal of groundwater. Salmon require sufficient streamflows for adults to locate their natal streams, pass to their upstream spawning grounds, and spawn, as well as for juveniles to migrate to the ocean. See *National Wildlife Fed'n* v. *Nat'l Marine Fisheries Serv.*, 524 F.3d 917, 935 (9th Cir. 2008); *Pacific Coast Fed'n of Fishermen's Ass'ns* v. *Gutierrez*, 606 F. Supp. 2d 1122, 1135 (E.D. Cal. 2008). Indeed, streamflow is one of the "critical drivers of juvenile salmonid growth, movement, survival, and reproduction." Annika W. Walters, et al., *Interactive Effects of Water Diversion and Climate Change for Juvenile Chinook Salmon in the Lemhi River Basin (U.S.A.)*, 27 Conservation Biology 1179, 1180 (2013). Human-caused diversion of water from rivers and streams can lead to declines in salmon populations and has been found to have "substantially interfer[ed] with salmonid migration in the Columbia River Basin since the nineteenth century." Nathan Baker, *Water, Water, Everywhere, and at Last A Drop for Salmon? NRDC v. Houston Heralds New Prospects Under Section 7 of the Endangered Species Act*, 29 Envtl. L. 607, 619 (1999).

Following the Ninth Circuit's logic, just as the presence of barrier culverts on Washington roads would render "the Tribes' right of access to their usual and accustomed fishing places * * * worthless without harvestable fish," so too might insufficient stream-

flows. Pet. App. 93a-94a. Tribes therefore would have a treaty-based guarantee of a flow in streams and rivers sufficient to support a salmon population that is large enough to provide treaty Indians a "moderate living."

This Court has held that "when the Federal Government withdraws its land from the public domain and reserves it for a federal purpose, the Government, by implication, reserves appurtenant water then unappropriated to the extent needed to accomplish the purpose of the reservation." *Cappaert* v. *United States*, 426 U.S. 128, 138 (1976); *Winters* v. *United States*, 207 U.S. 564, 576-577 (1908). "The doctrine applies to Indian reservations and other federal enclaves, encompassing water rights in navigable and nonnavigable streams." *Cappaert*, 426 U.S. at 138. But this Court has not applied the doctrine to infer a water right based on other treaty purposes not tied to reserved land. Applied to water rights, the Ninth Circuit's decision would extend beyond the narrow reserved-water-rights doctrine enunciated by this Court. It would instead establish a much broader implied water right that is appurtenant not to a tribe's reservation but to all usual and accustomed fishing grounds.

Applied in that context, the decision below would severely undermine Washington's water-rights regime. Like most western States, Washington follows the prior-appropriation doctrine and the "first in time, first in right" priority system. That system is "founded on the idea that at some point the water in a stream or lake will be insufficient to satisfy all potential users, and that the rights of those who have already appro-

priated water to a beneficial use will be superior to any later appropriators." *Swinomish Indian Tribal Cmty.* v. *Washington State Dep't of Ecology*, 311 P.3d 6, 15 (Wash. 2013). Under Washington law, a senior water right is "entitled to the quantity of water appropriated by him, to the exclusion of subsequent claimants." *Postema* v. *Pollution Control Hearings Bd.*, 11 P.3d 726, 734 (Wash. 2000) (quoting *Longmire* v. *Smith*, 67 P. 246, 249 (Wash. 1901)); see also Wash. Rev. Code § 90.03.010 (codifying the "first in time, first in right" principle).

The Ninth Circuit has previously ruled that a tribally held reserved water right for aboriginal fishing uses would have a priority date of time immemorial. *United States* v. *Adair*, 723 F.2d 1394, 1414 (9th Cir. 1983), cert. denied, 467 U.S. 1252 (1984). Such a priority date has the potential to displace every other water right lawfully created and recognized under Washington law. If tribes have an implied reserved water right for enough streamflow to support a quantity of fish that would provide for a "moderate living" for each tribe in each of the tribes' usual and accustomed places, there may be no surface water left in Washington to allocate to future users. Similarly, if there is not enough water to support the tribes' implied reserved water rights, then junior users whose rights infringe the tribes' water rights could see their perfected state-law water rights disappear.

C. This Court's review is needed now

In the Ninth Circuit's order denying rehearing, two judges from the panel expressed confidence that they had not "opened the floodgates to a host of future

suits." Pet. App. 11a (W. Fletcher, J., and Gould, J., concurring in the denial of rehearing en banc). That is so, they reasoned, because the Eleventh Amendment means that "a further suit against Washington State seeking enforcement of the Treaties cannot be brought by the Tribes." *Ibid.* In their view, the United States is "[t]he only possible plaintiff," and "[t]he United States is a responsible litigant and is not likely to burden the States without justification." *Ibid.*

That argument overlooks that the State is not the only possible defendant in further litigation seeking treaty enforcement. As explained above, a variety of land-use and water-allocation decisions can plausibly be alleged to infringe the expansive treaty right identified by the Ninth Circuit. Many of those decisions will be made by municipalities, which do not enjoy Eleventh Amendment immunity. See *Northern Ins. Co. of N.Y.* v. *Chatham Cnty.*, 547 U.S. 189 (2006). As for suits by the United States against the State, it may be that the United States is generally "a responsible litigant," but faith in its responsible litigation conduct is hardly a justification for adopting an unbounded treaty obligation. Washington should not be left "at the mercy of *noblesse oblige*." *United States* v. *Stevens*, 559 U.S. 460, 480 (2010).

This Court should not await further litigation before intervening to correct the Ninth Circuit's erroneous interpretation of the treaties. The decision below will have immediate harmful consequences. Regulators conducting agency proceedings must now attempt to incorporate the treaty right that the Ninth Circuit defined. And the decision will create ongoing uncertainty about the legal regime governing development

throughout the West. Significantly, the court of appeals did not merely block new development. Rather, brushing aside the State's laches argument, it ordered the removal or modification of culverts that had been in place for years. See Pet. 25-28. Anyone undertaking development that might affect salmon—essentially all development—will have to confront the possibility that the court's decision will be applied, years down the road, to require that the development be altered. Similarly, holders of water rights will face doubt about whether their state-law property rights will be impaired to satisfy the court's understanding of the treaty's obligations.

The uncertainty created by the decision will inhibit investment and development throughout the West. To prevent that result, this Court's review is needed now.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted.

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RECORD AND BRIEFS

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BRIEF OF *AMICI CURIAE* STATES OF IDAHO, KANSAS, LOUISIANA, MAINE, MONTANA, NEBRASKA AND WYOMING IN SUPPORT OF PETITIONER

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INTEREST OF THE *AMICI CURIAE* STATES[1]

The interest of the *amici curiae* rests on perhaps the most basic tenet of the United States Constitution: the several States retain primary responsibility in our Union for ensuring that the interests of all their residents are protected. U.S. Const. amend. X. Discharging that responsibility requires them to make often difficult choices about how best to use their limited fiscal resources. Whatever balance they strike inevitably displeases some, with their political and occasionally judicial branches providing the mechanism for restriking that balance. Although federal law can limit the States' sovereign authority, U.S. Const. art. VI, cl. 2, stringent preemption standards apply to Congressional action when it legislates "in a field which States have traditionally occupied." *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947). Indian treaties – like those here – can alter this standard because they must "be construed, not according to the technical meaning of its words to learned lawyers, but in the sense in which they would naturally be understood by the Indians." *Jones v. Meehan*, 175 U.S. 1, 11 (1889). "But even Indian treaties cannot be re-written or expanded beyond their clear terms to remedy a claimed injustice or to achieve the asserted understanding of the parties." *Choctaw Nation v. United States*, 318 U.S. 423, 432 (1943).

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[1] In compliance with S. Ct. R. 37.2(a), counsel of record for all parties received notice at least ten days prior to the due date of this brief of *amici curiae*'s intention to file it.

This case involves, as an immediate matter, the last of those principles. The Ninth Circuit has plainly "expanded" the fishing clause in the Stevens treaties "beyond [its] clear terms" as definitively construed by this Court in *Washington v. Washington State Commercial Passenger Fishing Vessel Association*, 443 U.S. 658 (1979) (*Fishing Vessel*), to imply what a prior Ninth Circuit panel and commentators characterize as an "environmental servitude." It has further placed its imprimatur on a district court injunction effectively seizing federal judicial control over the Washington State culvert system but, of course, leaving the fiscal burden on the State to the tune of a billion-plus dollars.

While the Ninth Circuit decision's immediate impact pretermits the internal governance by one State over one program, it writes a script for subjecting a broad swath of regulation by States, including the *amici curiae*, to like servitudes. Two-thirds of the States contain Indian reservations or other Indian country established by treaty or statute. Conference of W. Att'ys Gen., *American Indian Law Deskbook* § 5:16, at 331 (West 2017). Tribal fishing or other subsistence rights, both on and off reservation, exist in many of those States. Under the Ninth Circuit's reasoning, a servitude on state land-use (and other) regulation can be *implied* to avoid negative impacts on such rights through generally applicable, non-discriminatory regulation (as the Washington culvert program concededly is). The *amici*'s concerns are not apocalyptical. The Environmental Protection Agency (EPA) has relied on the decision below to impose federal, rather

than state, water quality standards (WQS) in Maine and Washington insofar as they applied to waters where it deemed subsistence fishing rights existed. If the Ninth Circuit's unprecedented foray into commandeering state decision-making processes over land use or other areas of traditional state responsibility charts the correct path, this Court should say so. The *amici* States believe that the Court will say the opposite. Either way, the issue has too much importance to be left for contentious, resource-depleting litigation in judicial and administrative forums across the country.

SUMMARY OF THE ARGUMENT

1. States have a fundamental sovereign interest in treaty or statutory provisions affecting natural resources being applied consistently with their plain scope and not expanded to create wholly new rights. The Ninth Circuit opinion breaks ground by interpreting the fishing clause to prohibit States or presumably other local governmental entities from taking land-use or other regulatory actions, or to undo past actions, that may adversely affect the amount of the harvestable fish – what a prior Ninth Circuit panel and commentators have referred to as an "environmental servitude." The court of appeals' expansive interpretation takes on added significance for *certiorari* purposes because it directly conflicts with *Fishing Vessel*'s authoritative construction that the treaty provision's twin purposes are to provide access to aboriginal fishing grounds and to apportion otherwise available

harvestable fish between tribal members and non-members. *Fishing Vessel* used the "moderate living" standard only as an absolute limit on the tribal share, not a treaty-secured entitlement which Washington must take remedial action to help achieve. That the decision's reasoning has general impact is reflected by EPA's recent reliance on it in imposing federal water quality standards under the Clean Water Act (CWA), 33 U.S.C. §§ 1251-1388, based upon statutory and treaty fishing rights in Maine and Washington.

2. The question whether the United States is subject to equitable defenses such as laches, waiver and estoppel when it enforces treaty rights has now generated two different answers in the aftermath of *City of Sherrill v. Oneida Indian Nation*, 544 U.S. 197 (2005) (*Sherrill*) – one from the Second Circuit and another from the Ninth Circuit. *Sherrill*, although arising in the context of a land claim brought by a tribe, contains an analytical structure that, as the Second Circuit has held, admits no distinction between tribes and the United States. The Second Circuit's understanding of *Sherrill* makes sense because any other result allows the federal government to escape the consequences of its own acts of omission or commission and to shift all or a portion of liability for them to a State or local government. The issue's resolution has wide importance where treaty or statutory-based claims are asserted by the United States that threaten to disrupt long-established state and local government practices or programs. This case presents an especially appropriate opportunity for clarifying *Sherrill*'s scope

in light of the United States' direct involvement in the construction of myriad culverts that it now demands Washington to remediate.

3. The district court issued, and the Ninth Circuit affirmed, an expansive permanent injunction. Its elaborate detail effectively transformed the trial court into an administrative agency – a judicial role that a 2009 Ninth Circuit *United States v. Washington* decision warned against. Beyond that core flaw, the injunction departs from settled boundaries on appropriate coercive relief against States or their officials. First, the relief ordered massive changes to the state culvert system under a single, general criterion, not through a culvert-specific assessment of benefit and cost. Second, the relief in practical effect supersedes Washington's ongoing remediation efforts to lessen its culverts' impact on salmon passage. The relief ignores limits on the federal judiciary's injunctive powers to control a State's sovereign authority over its governmental programs and, necessarily, how and when state funds are expended. This Court should reiterate the core principles of general equity practice and federalism that undergird its existing precedent if the case is remanded for further proceedings on the merits.

ARGUMENT

I. THE NINTH CIRCUIT'S IMPLICATION OF AN ENVIRONMENTAL SERVITUDE FROM THE TREATY FISHING PROVISION WITH RESPECT TO STREAM CULVERTS BOTH CONFLICTS WITH *FISHING VESSEL* AND CREATES THE SPECTER OF SUCH SERVITUDE'S APPLICATION TO A BROAD RANGE OF STATE AND LOCAL GOVERNMENT REGULATORY DECISION-MAKING

A. Isaac I. Stevens and Joel Palmer, then Superintendents of Indian Affairs for Washington and Oregon Territories, entered into ten treaties with Pacific Northwest Indian tribes between December 1854 and July 1855,[2] each of which reserved on- and off-reservation hunting, fishing and other usufructuary rights in largely comparable language. *See, e.g.*, Treaty with Nisquallys (Treaty of Medicine Creek), art. III, 10 Stat. 1132, 1133 (Dec. 26, 1854) ("The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory."). The fishing rights reserved under the Stevens treaties exist in Idaho, Montana, Oregon and Washington. Their scope and application have spawned substantial litigation over the last half century, with much of it now centered in two federal district court proceedings – this case and *United States v. Oregon*, No. 3:68-cv-513-KI (D. Or.). One Ninth Circuit panel, comparing the litigation below to the

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[2] This brief refers to them collectively as the Stevens treaties.

generations-long Chancery will dispute in *Bleak House*,[3] observed that "this case has become a Jarndyce and Jarndyce, with judges dying out of it and whole Indian tribes being born into it." *United States v. Washington*, 573 F.3d 701, 709 (9th Cir. 2009). The panel further observed that "the Constitution does not establish the district courts as permanent administrative agencies." *Id.*

Notwithstanding the length of the *United States v. Washington* proceeding below, this Court has addressed issues arising from it only in *Fishing Vessel*. Six decisions construing the fishing clause, however, preceded *Fishing Vessel*. *United States v. Winans*, 198 U.S. 371, 381-82 (1905); *Seufert Bros. Co. v. United States*, 249 U.S. 194, 198 (1919); *Tulee v. Washington*, 315 U.S. 681, 685 (1942); *Puyallup Tribe v. Dep't of Game*, 391 U.S. 392, 398 (1968); *Dep't of Game v. Puyallup Tribe*, 414 U.S. 44, 48 (1973); and *Puyallup Tribe, Inc. v. Dep't of Game*, 433 U.S. 165, 177 (1977). The decisions, while separated by over 70 years and applying the fishing clause in differing factual contexts, share a common thread: All construed the clause as reserving tribal access to a share of *harvestable* anadromous fish runs. The Ninth Circuit thus did not write on a clean slate. It instead re-wrote this Court's construction by imposing a burden on the State to increase the *amount* of harvestable fish; *i.e.*, it augmented the share-of-the-pie entitlement with a duty to increase the pie's size. Only this departure from the

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[3] Charles Dickens, *Bleak House* (Bradbury & Evans 1853).

Court's consistent construction of the clause allowed the Ninth Circuit to create the environmental servitude giving rise to the first question presented.

B. Beginning with the *Puyallup* trilogy, the access issue took on its modern shape of accommodating the competing demands of Indian and non-Indian fishermen to salmon and steelhead runs dramatically decreased from their treaty-time populations and needing conservation protection. As this Court would later state in *Fishing Vessel*, "it is fair to conclude that when the treaties were negotiated, neither party realized or intended that their agreement would determine whether, and if so how, a resource that had always been thought inexhaustible would be allocated between the native Indians and the incoming settlers when it later became scarce." 443 U.S. at 669.

Fishing Vessel built directly upon the *Puyallup* trilogy in construing the fishing clause and left no doubt about its meaning. 443 U.S. at 682-84. This Court characterized as "totally foreign to the spirit of the negotiations" the contention, proffered by one state agency, that the phrase "in common with" simply meant "[t]hat each individual Indian would share an 'equal opportunity' with thousands of newly arrived settlers" to fish. *Id.* at 676. Rather, "the purpose and language of the treaties are unambiguous; they secure the Indians' right to take a share of each run of fish that passes through tribal fishing areas." *Id.* at 679. The Court buttressed this conclusion with the *Puyallup* cases' application of the treaty provision that "clearly establish[ed] the principle that neither party

to the treaties may rely on the State's regulatory powers or on property law concepts to defeat the other's right to a 'fairly apportioned' share of each covered run of *harvestable* anadromous fish." *Id.* at 682 (emphasis added). Turning to the question of what the "share" should be, this Court "agree[d] with the Government that an equitable measure of the common right should initially divide the *harvestable* portion of each run that passes through a 'usual and accustomed' place into approximately equal treaty and nontreaty shares, and should then reduce the treaty share if tribal needs may be satisfied by a lesser amount." *Id.* at 685 (emphasis added). It even defined the term "harvestable" as the "amount of fish" remaining after "subtracting from the total number of fish in each run the number that must be allowed to escape for conservation purposes." *Id.* at 670 n.15.

This Court then pivoted to determining the "lesser amount" that would warrant a reduction of the treaty share of the harvestable anadromous runs. It credited the federal district court's basic apportionment formula of "starting with a 50-50 division and adjusting slightly downward on the Indians' side when it became clear that they did not need a full 50%." 443 U.S. at 685. The Court stressed "the 50% figure imposes a maximum but not a minimum allocation." *Id.* at 686. "[T]he central principle here must be that Indian treaty rights to a natural resource that once was thoroughly and exclusively exploited by the Indians secures so much as, but no more than, is necessary to provide the Indians with a livelihood – that is to say, a moderate

living." *Id.* The Court criticized the dissent on this point, noting that "[b]ecause the 50% figure is only a ceiling, it is not correct to characterize our holding 'as guaranteeing the Indians a specified percentage' of the fish." *Id.* at n.27. It gave an example of when "changing circumstances" could warrant a downward adjustment – a reduction in tribal membership to a level that would make a "45% or 50% allocation of an entire run that passes through [the tribe's] customary fishing grounds . . . manifestly inappropriate because the livelihood of the tribe under those circumstances could not reasonably require an allotment of a large number of fish." *Id.* at 687.

The powerful nine-judge dissent from the Ninth Circuit's denial of *en banc* rehearing rightly reasoned that "the panel opinion turns *Fishing Vessel* on its head" by "impos[ing] an affirmative duty upon the State to provide a certain quantity of fish, which reads out the 50% ceiling entirely." Pet.App. 24a. This is so because the 50% limit accommodates the modern era fact of life that population increases and related economic development have caused, and likely will continue to cause, salmon populations insufficient to support a moderate living. In defense of the panel ruling, two of its members responded that the decision did not depart from *Fishing Vessel* because "there is nothing in the [Supreme] Court's opinion that authorizes the State to diminish or eliminate the supply of salmon available for harvest." Pet.App. 10a. But that response misstates the dispositive question: whether the fishing clause, as definitively construed in *Fishing Vessel*, does

"authorize[]" the environmental servitude that the Ninth Circuit decision creates. It plainly does not. The rehearing denial concurrence also attempted to limit the potential breadth of that servitude by disclaiming "that the Tribes are entitled to enough salmon to provide a moderate living, irrespective of the circumstances," or any intent to "hold that the promise is valid against all human-caused diminutions, or even against all State-caused diminutions." *Id.* Tellingly, though, it failed to articulate any standard upon which to distinguish those "diminutions" from Washington's culvert system. One can only conclude that the true measure is the length of the Chancellor's foot. *See, e.g.*, *Grupo Mexicano de Desarrollo, S.A. v. Alliance Bond Fund, Inc.*, 527 U.S. 308, 332-33 (1999).[4]

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[4] The district court's rejection of the contention "[t]he State's duty to maintain, repair or replace culverts which block passage of anadromous fish does not arise from a broad environmental servitude against which the Ninth Circuit Court of Appeals cautioned" in *United States v. Washington*, 694 F.2d 1374, 1381 (9th Cir. 1982), *vacated on reh'g*, 759 F.2d 1353 (9th Cir. 1985) (*en banc*), reflects the *ipse dixit* quality of the Ninth Circuit's holding in this case. Pet.App. 178a. "Instead," the district court explained, "it is a narrow and specific treaty-based duty that attaches when the State elects to block rather than bridge a salmon-bearing stream with a roadbed." *Id.* To be sure, the injunction pertains only to stream culverts, but the district court's explanation does not answer the real question of why stream culverts differ from other governmental (or non-governmental activities) that may negatively affect salmonid populations. The district court's failure to offer a reasoned, general standard contrasts sharply with the analysis in *Nez Perce Tribe v. Idaho Power Co.*, 847 F. Supp. 791 (D. Idaho 1994). There, a Stevens treaty tribe sought damages against a power company for construction and maintenance of

C. The Ninth Circuit's construction and application of the fishing clause thus have both Stevens treaty-specific and much wider significance. Its construction transforms the treaty right to a defined share of available harvestable fish into a right of access to an amount of harvestable fish sufficient to support a moderate standard of living. It is a short step from the latter right to creating a claim for injunctive relief against States or their officials, state political subdivisions and private parties against *any* diminishment of fish runs subject to harvest and human consumption.[5] From a

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dams that diminished anadromous fish runs from their 1855 levels. The court rejected the claim, holding that "Indian tribes do not have an absolute right to the preservation of the fish runs in their original 1855 condition, free from all environmental damage caused by the migration of increasing numbers of settlers and the resulting development of the land." *Id.* at 808. Rather, "[t]he Stevens treaties require that any development authorized by the states which injures the fish runs be non-discriminatory in nature . . . but does [*sic*] not, however, guarantee that subsequent development will not diminish or eventually, and unfortunately, destroy the fish runs." *Id.* at 814. No evidence here suggests that discrimination against tribal fishing rights tainted the design and operation of Washington's culvert system. The parties' admitted facts showed precisely the opposite; *i.e.*, the State has long recognized the impact of culverts on anadromous species' migration and taken affirmative action to reduce that impact. Pet.App. 144a-156a. Indeed, the required apportionment between treaty and non-treaty fishermen serves as a bulwark against such discrimination.

[5] Commentary on the Ninth Circuit's decision is limited thus far but recognizes its implications with respect to, *inter alia*, dams, water diversions increasing stream temperatures, timber harvests, grazing practices and sediment-producing construction projects. Michael C. Blumm, *Indian Treaty Fishing Rights and the Right to Habitat Protection and Restoration*, 92 Wash. L. Rev. 1,

Stevens treaty perspective, this expansion of the fishing clause's scope has immense consequences given the treaties' geographical reach throughout the Pacific Northwest. But the Ninth Circuit's reasoning logically extends beyond the fishing clause to any usufructuary entitlement in those treaties. So, to use the Treaty of Medicine Creek, fishing is only one of several rights reserved under Article III. The entire article provides:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all

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27-33 (2017). Various commentators have discussed the potential reach of the district court's 2007 decision (Pet.App. 249a) that laid the predicate for the 2013 injunction. *See, e.g.*, Katheryn A. Bilodeau, Comment, *The Elusive Implied Water Right for Fish: Do Off-Reservation Instream Water Rights Exist to Support Indian Treaty Fishing Rights?*, 48 Idaho L. Rev. 515, 545 (2012) ("The holding in Culverts added a new dimension to the fishing litigation. With a sufficiently defined scope, treaty fishing language includes a right to protection from environmental degradation."); Michael C. Blumm & Jane G. Steadman, *Indian Treaty Fishing Rights and Habitat Protection: The Martinez Decision Supplies a Resounding Judicial Reaffirmation*, 49 Nat. Resources J. 653, 695-96 (2009) ("An 'unreasonable interference' in the context of the Stevens treaties is habitat degradation that results in decreased fish populations, which, in turn, prevents tribes from being able to make a moderate living from fishing. [¶] Thus, only activities that restrict tribes' ability to earn a moderate living from fish unreasonably interfere with the tribes' piscary profit.") (footnote omitted); William Fisher, Note, *The Culverts Opinion and the Need for a Broader Property-Based Construct*, 23 J. Envtl. L. & Litig. 491, 511 (2008) ("This case can also be viewed as a stepping stone toward the establishment of either: (1) a broad duty, such as that originally established by the district court in Phase II, or (2) several narrow duties (such as this one) directed at specific activities that harm fish passage and habitat.").

> citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands: Provided, however, That they shall not take shellfish from any beds staked or cultivated by citizens, and that they shall alter all stallions not intended for breeding-horses, and shall keep up and confine the latter.

10 Stat. at 1133. Although certain other Stevens treaties do not include the proviso, they contain the remaining rights. Carried to its natural conclusion, the Ninth Circuit's reasoning imposes an environmental servitude that prevents States or their political subdivisions from taking actions that negatively affect hunting, gathering or pasturing privileges on "open and unclaimed lands" or failing to remediate past actions that did. Requiring the United States or tribes to litigate with a scalpel, not a broadsword, does not lessen the range of activities subject to servitude.

Beyond the Stevens treaties lies the effect of the Ninth Circuit's decision in other contexts. Recent EPA actions and final rules declining to approve Maine and Washington WQS and imposing federal WQS in their stead are likely harbingers. *See* 81 Fed. Reg. 92,466 (Dec. 19, 2016) (Maine); 81 Fed. Reg. 85,417 (Nov. 28, 2016) (Washington). Maine has a nationally unique tribal-state relationship with four tribes as a result of a 1980 settlement reflected in federal and state statutes (the Maine Indian Settlement Acts). *See id.* at 92,467. In February 2015, EPA interpreted those acts

as implicitly requiring a new CWA tribal sustenance fishing designated use for unspecified Maine waters that Maine itself never adopted. *See id.* at 92,472, 92,478. In subsequent rulemaking, EPA built on this new interpretation and cited the Ninth Circuit's decision for the proposition that "it would defeat the purposes of the [settlement acts] for the tribes in Maine to be deprived of the ability to safely consume fish from their waters at sustenance levels" (*id.* at 92,479-80):

> [T]he Ninth Circuit Court of Appeals recently determined that the right of tribes in the State of Washington to fish for their subsistence in their "usual and accustomed" places necessarily included the right to an adequate supply of fish, despite the absence of any explicit language in the applicable treaties to that effect. Specifically, the Court held that "the Tribes' right of access to their usual and accustomed fishing places would be worthless without harvestable fish."

Id. at 92,479 (footnote omitted).[6] As to Washington, EPA found the decision, along with other cases, to support a Department of the Interior legal opinion "conclud[ing] that 'fundamental, longstanding tenets of federal Indian law support the interpretation of tribal fishing rights to include the right to sufficient water

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[6] Maine has requested repeal or withdrawal of EPA's February 2015 action underlying EPA's final rule. That request is presently pending before EPA, and Maine's pending appeal of that action has been stayed for 120 days by order entered on August 29, 2017. *Maine v. McCarthy*, No. 1:14-cv-00264-JDL (D. Me.) (ECF No. 108).

quality to effectuate the fishing right.'" *Id.* at 85,423 n.39. The same rationale has potential application to myriad treaty and statutory provisions that have subsistence-related purposes and therefore raises the specter of resource-depleting litigation like the long-lived litigation below. The petition should be granted to reaffirm the fishing clause's scope as determined in *Fishing Vessel* and remove that specter or, alternatively, to establish a standard leaving intact non-discriminatory state land-use programs, like Washington's culvert system, or other non-discriminatory regulatory measures that may have an effect on waters in which tribes have statutory or treaty fishing rights.

II. THE SECOND AND NINTH CIRCUITS' CONFLICTING DECISIONS OVER *SHERRILL*'S APPLICABILITY TO CLAIMS BY THE UNITED STATES TO VINDICATE A TRIBE'S TREATY RIGHTS SHOULD BE RESOLVED IN THIS CASE

"Laches is 'a defense developed by courts of equity to protect defendants against unreasonable, prejudicial delay in commencing suit.'" *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 960 (2017). "A waiver is ordinarily an intentional relinquishment or abandonment of a known right or privilege." *Johnson v. Zerbst*, 304 U.S. 458, 460 (1938). "The vital principle [for equitable estoppel] is that he who by his language or conduct leads another to do what he would not otherwise have done, shall not subject such person to loss or injury by disappointing the

expectations upon which he acted." *Dickerson v. Colgrove*, 100 U.S. 578, 560 (1879); *see also Glus v. Brooklyn E. Dist. Terminal*, 359 U.S. 231, 233-34 (1958). These equitable defenses have clear relevance here given the United States' pre-2001 conduct.

To start, the Washington State Department of Transportation (WSDOT) adhered to hydraulic culvert designs published by the Federal Highway Administration (FHWA) until Washington itself developed a stream simulation design that improved upon the federal model. Federal agencies have used the Washington design to modify their own practices. Pet.App. 137a-139a. WSDOT also has an ongoing program to remediate its salmon barrier culverts for which it has received excellence awards from the FHWA. Pet.App. 144a-155a. There is, as well, no dispute that Washington's road building activities, including culvert construction, have been ongoing for many decades. Pet.App. 139a-144a. Needless to say, tribal members and other state residents directly benefitted, and continue to benefit, from the state road infrastructure. The United States and the tribes could have challenged the State's actions as they were being undertaken or to bring proposed ameliorative measures to the state agencies' attention through sovereign-to-sovereign collaboration or asserted claims under statutes such as the CWA or the Endangered Species Act, 16 U.S.C. §§ 1531-1544.

The trial record thus contained substantial evidence that the United States partnered with Washington over many decades in culvert construction and

maintenance. The Ninth Circuit nonetheless deemed the State's equitable defenses based, *inter alia*, on that partnership unavailable "[b]ecause the treaty rights belong to the Tribes rather than the United States" and thus outside the federal government's prerogative to waive. Pet.App. 98a. *Sherrill*, it further held, "radically" differed insofar as this case did not involve a tribal claim to sovereignty over abandoned lands, a situation where the tribes had authorized the state culvert program, or a revival of "disputes that have long been left dormant." Pet.App. 99a. The Ninth Circuit's attempt to distinguish the two cases on their particular facts served at most rhetorical ends; the controlling question is whether *Sherrill* makes equitable defenses like laches, waiver and estoppel available against the United States based on *its* conduct. The Ninth Circuit answered that question with a categorical "no."

The Second Circuit, however, has reached the opposite conclusion. As it stated in *Cayuga Indian Nation v. Pataki*, 413 F.3d 266 (9th Cir. 2005), "[w]e recognize that the United States has traditionally not been subject to the defense of laches" but immediately added that "this does not appear to be a *per se* rule." *Id.* at 278. The *Cayuga* court then endorsed a set of factors formulated by the Seventh Circuit in *United States v. Administrative Enterprises, Inc.*, 46 F.3d 670 (7th Cir. 1995), governing application of laches to the United States: "first, 'that only the most egregious instances of laches can be used to abate a government suit'; second, 'to confine the doctrine to suits against the government in which . . . there is no statute of limitations';

and third, 'to draw a line between government suits in which the government is seeking to enforce either on its own behalf or that of private parties what are in the nature of private rights, and government suits to enforce sovereign rights, and to allow laches as a defense in the former class of cases but not the latter.'" 413 F.3d at 279; *see also Oneida Indian Nation v. County of Oneida*, 617 F.3d 114, 129 (2d Cir. 2010) ("*Cayuga* expressly concluded that the United States is subject to such defenses under circumstances like those presented here (*i.e.*, a lengthy delay in asserting the relevant cause of action, the absence of an applicable statute of limitations for the great majority of this delay, and an intervention to vindicate the interests of an Indian nation)."). Each factor exists here. The Ninth Circuit panel did not even acknowledge those decisions' contrary holding – as the opinion dissenting from *en banc* rehearing discussed. Pet.App. 34a-35a. This Court should grant *certiorari* to resolve the inter-circuit conflict.

III. THE EXPANSIVE INJUNCTIVE RELIEF AWARDED BY THE DISTRICT COURT AND AFFIRMED BY THE NINTH CIRCUIT MISAPPLIED STRINGENT STANDARDS ESTABLISHED BY THIS COURT AND WARRANTS REVIEW TO REITERATE THE NEED FOR CAREFUL COMPLIANCE WITH THEM

The district court's March 2013 permanent injunction requires Washington, *inter alia*, to:

- prepare within six months a list of all culverts under state-owned roads that are salmon barriers;
- assess and identify, on an ongoing basis, culverts under state-owned roads that become salmon barriers after the injunction's issuance;
- construct new culverts on case-area "salmon waters" in compliance with the injunction's standards;
- require by October 31, 2016 three of the four state agencies managing culverts to provide fish passage in compliance with the injunction's standards;
- require WSDOT within 17 years to provide fish passage in compliance with the injunction's standards on all culverts "if the barrier culvert has 200 lineal meters or more of salmon habitat upstream in the first natural passage barrier";
- require WSDOT to provide fish passage in compliance with the injunction's standards on culverts "having less than 200 lineal meters of upstream salmon habitat at the end of the culvert's useful life, or sooner as part of a highway project, to the extent required by other applicable law";
- provide fish passage when a corrected culvert fails to provide such passage or a new culvert is added to the list of salmon barrier culverts; and

- provide tribes with sufficient notice of the salmon barrier culvert inventory, newly identified barrier culverts and correction activities "to monitor and provide effective recommendations for compliance with the [injunction's] requirements."

Pet.App. 236a-240a. The injunction, as the preceding summary indicates, specifies not only what must be done but also dictates the culvert remediation standards themselves. Pet.App. 238a-239a. The district court, finally, retains "continuing jurisdiction over this subproceeding for a sufficient period to assure that the Defendants comply with the terms of this injunction." Pet.App. 240a-241a.

The injunction fits seamlessly within not only the 2009 Ninth Circuit panel's reference to Jarndyce and Jarndyce but also its concern over federal district courts taking on the role of an administrative agency. It subjects Washington's sovereign management of its culvert system to tribal oversight and federal judicial control for potentially decades. The district court's coercive relief exacts a heavy toll from both state sovereignty and public coffers. The latter toll is staggering. The district court's findings on the remediation costs for WSDOT projects, while spare, suggest that they could range between $658,639 (for projects completed before the 2009 trial) and an estimated $1,827,168 (state expert estimate identified in the 2013 findings). Pet.App. 170a. As of March 2009, over 800 culverts under state roads had more than 200 meters of anadromous salmon habitat upstream. Pet.App. 142a.

Washington can expect, therefore, to spend in excess of one billion dollars under even a conservative assumption that actual per-culvert cost falls within the average of those amounts ($1,242,903), not considering inflation.

The petition, like the opinion dissenting from *en banc* rehearing, summarizes the injunction's palpable overbreadth. Pet. 28-32; Pet.App. 36a-41a. The *amici* States believe that two points bear particular emphasis. *First*, the district court's findings effectively attribute to state culverts salmon population impacts even though (1) those culverts constitute a small percentage of all salmon barrier culverts in the case area and (2) no evidence exists as to the ultimate increase in returning harvestable fish that the State's billion-dollar plus expenditure will generate. Multiple factors – *e.g.*, ocean conditions, non-case area harvest and non-culvert-related habitat constraints – affect available harvest. As the rehearing dissent observed, "[g]iven the significant cost of replacing barriers, . . . being forced to replace even a single barrier that will have *no tangible impact* on the salmon population is an unjustified burden." Pet.App. 39a. Obviously enough, respondents focused on state culverts because they perceived them in gross as easy targets. But the federal courts extraordinary power to issue coercive relief against States and their officials must be tailored narrowly to matching every element of the relief to an identifiable and proportionate benefit. The district court simply did not engage in the requisite cost-benefit analysis on a culvert-by-culvert basis. *See Milliken v.*

Bradley, 433 U.S. 267, 281-82 (1977) ("The well-settled principle that the nature and scope of the remedy are to be determined by the violation means simply that federal-court decrees must directly address and relate to the constitutional violation itself. Because of this inherent limitation upon federal judicial authority, federal-court decrees exceed appropriate limits if they are aimed at eliminating a condition that does not violate the Constitution or does not flow from such a violation, . . . or if they are imposed upon governmental units that were neither involved in nor affected by the constitutional violation[.]") (citation omitted).

Second, Washington has not ignored, and is not ignoring, improving culvert fish passage. In 1997, the state legislature established the Fish Passage Task Force, and since then "the state agencies have identified fish passage barriers under their roads and have accelerated the rate of correction of such barriers." Pet.App. 147a (admitted facts ¶ 3.89). Two of the state agencies had "a goal of correcting their barrier culverts by July 2016[,]" with "the level of funding" as "[t]he primary factor determining the rate at which the State can correct fish barrier culverts." Pet.App. 148a (admitted facts ¶¶ 3.90 and 3.92). The district court's failure to defer to the state process does not square with this Court's admonition in the seminal *Rizzo v. Goode*, 423 U.S. 362 (1976):

> When a plaintiff seeks to enjoin the activity of a government agency, even within a unitary court system, his case must contend with

> "the well-established rule that the Government has traditionally been granted the widest latitude in the 'dispatch of its own internal affairs[.]' . . . The District Court's injunctive order here, significantly revising the internal procedures of the Philadelphia police department, was indisputably a sharp limitation on the department's "latitude in the 'dispatch of its own internal affairs.'" [¶] When the frame of reference moves from a unitary court system, governed by the principles just stated, to a system of federal courts representing the Nation, subsisting side by side with 50 state judicial, legislative, and executive branches, appropriate consideration must be given to principles of federalism in determining the availability and scope of equitable relief.

Id. at 378-79 (citations omitted); *see Lewis v. Casey*, 518 U.S. 343, 385-86 (1996) (Thomas, J., concurring) ("Broad remedial decrees strip state administrators of their authority to set long-term goals for the institutions they manage and of the flexibility necessary to make reasonable judgments on short notice under difficult circumstances. . . . At the state level, such decrees override the 'State's discretionary authority over its own program and budgets and forc[e] state officials to reallocate state resources and funds to the [district court's] plan at the expense of other citizens, other government programs, and other institutions not represented in court.'") (citations omitted). This Court should grant *certiorari* as to the third question presented to reiterate clearly-established equity and

federalism principles in the event that remand proceedings on the merits are ordered.

CONCLUSION

The petition for writ of *certiorari* should be granted.

Respectfully submitted,

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September 2017

No. 17-269

In The
Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.

Respondents.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

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PETITION FOR CERTIORARI FILED AUGUST 17, 2017
CERTIORARI GRANTED JANUARY 12, 2018

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01-16-2001	RESPONSE TO REQUEST FOR DETERMINATION re: culverts by Interested Party USA in 2:01-sp-00001 request [1-1] in 2:01-sp-00001 (NS) (bz). (Entered: 01/17/2001)
01-20-2001	NOTICE OF JOINDER by plaintiff Muckleshoot Indian Tribe in 2:01-sp-00001 in Request for Determination filed by tribes on 1/12/01; service attached -- svc. by mail on 1/12/01 (NS) (bz). (Entered: 01/22/2001)
03-16-2001	STATE OF WASHINGTON'S ANSWER, CROSS AND COUNTER REQUESTS

	FOR DETERMINATION by defendant Washington State of in 2:01-sp-00001; crsclm against Interested Party USA in 2:01-sp-00001; cntclm against Tribes (Suquamish Indian Tribe, Jamestown S'Klallam, Lower Elwha, Port Gamble Band Clallam, Nisqually Indian Tribe, Nooksack Tribe, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Upper Skagit Tribe, Tulalip Tribe, Lummi Indian Nation, Quinault Indian Nation, Suquamish Indian Tribe, Puyallup Tribe, Hoh Tribe, Yakama Indian Nation, Quileute Indian Tribe, Makah Nation, Swinomish Indian Tribe, and the Muckleshoot Indian Tribe) (NS) Modified on 03/16/2001 (bz). (Entered: 03/16/2001)
06-01-2001	PLAINTIFF TRIBES' ANSWER TO WASHINGTON STATE'S COUNTER REQUEST FOR DETERMINATION [9-2] in 2:01-sp-00001 (filed by Swinomish Indian Tribal Community, Jamestown, Lower Elwha & Port Gamble S'Klallam Tribes, Nisqually, Nooksack, Sauk-Suiattle, Skokomish, Squaxin Island, Stillaguamish, Suquamish, Upper Skagit, Lummi Indian Nation, Makah Tribe, Hoh Tribe, Tulalip Tribes, Quinault Indian Nation, Puyallup Tribe, Muckleshoot tribe, Quileute Tribe, Yakama Indian Nation);

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06-18-2001 MOTION by Interested Party USA in 2:01-sp-00001 to strike affirmative defenses or for jdgmnt on pleadings NOTED FOR 7/13/01 in 2:01-sp-00001 (NS) (bz). (Entered: 06/18/2001)

06-18-2001 MEMORANDUM by Interested Party USA in 2:01-sp-00001 in support of motion to strike affirmative defenses or for jdgmnt on pleadings [36-1] in 2:01-sp-00001 (NS) (bz). (Entered: 06/18/2001)

06-27-2001 MOTION by defendant Washington State of in 2:01-sp-00001 for order granting judgment on the pleadings re: law of the case NOTED FOR 7/20/01 in 2:01-sp-00001, (NS) (bz). (Entered: 06/27/2001)

06-27-2001 BRIEF IN SUPPORT by defendant Washington State of in 2:01-sp-00001 in support of motion for order granting judgment on the pleadings re: law of the case [43-1] in 2:01-sp-00001 (NS) (bz). (Entered: 06/27/2001)

07-12-2001 ORDER REGARDING STATUS CONFERENCE by Judge Barbara J. Rothstein. On July 10, 2001, the court held a status conf. with all parties present. After hearing from the parties, the court considered the following matters and reached the following conclusions: The USA shall be considered a plaintiff in this subproceeding for all purposes; The court

	has approved and signed the scheduling order agreed to by all parties; The court concluded it will not require that the "Phase II" designation be included as part of the caption of this subproceeding (please see order for details). (cc: 9213 counsel, BJR) (NS) (Entered: 07/12/2001)
07-14-2001	STATE'S OPPOSITION by defendant Washington State of in 2:01-sp-00001 to motion to strike affirmative defenses or for jdgmnt on pleadings [36-1] in 2:01-sp-00001 (NS) (bz). (Entered: 07/17/2001)
07-19-2001	REPLY MEMORANDUM by plaintiff USA in 2:01-sp-00001 IN SUPPORT OF US's motion to strike affirmative defenses or for jdgmnt on pleadings [36-1] in 2:01-sp-00001; service attached -- svc. by mail on 7/18/01 (NS) (bz). (Entered: 07/19/2001)
07-20-2001	ORDER DENYING MOTION TO DISMISS by Judge Barbara J. Rothstein DENYING USA's motion to dismiss State's Cross-RFD [19-1] in 2:01-sp-00001 (cc: 9213 counsel, BJR) (NS) (Entered: 07/23/2001)
07-26-2001	UNITED STATES' OPPOSITION by plaintiff USA in 2:01-sp-00001 to Washington State's motion for order granting judgment on the pleadings re: law of the case [43-1] in 2:01-sp-00001; service attached -- svc. by mail on 7/25/01. (NS) (bz). (Entered: 07/30/2001)

07-27-2001 TRIBES' MEMORANDUM OPPOSING STATE OF WASHINGTON'S motion for order granting judgment on the pleadings re: law of the case [43-1] in 2:01-sp-00001; service attached -- svc. by mail on 7/26/01 (NS) (bz). (Entered: 07/30/2001)

08-02-2001 ANSWER by plaintiff USA in 2:01-sp-00001 to WASHINGTON STATE'S CROSS REQUEST FOR DETERMINATION [9-1] in 2:01-sp-00001 (NS) (bz). (Entered: 08/03/2001)

08-09-2001 REPLY by defendant Washington State of in 2:01-sp-00001 IN SUPPORT of its motion for order granting judgment on the pleadings re: law of the case [43-1] in 2:01-sp-00001; service attached -- svc. by mail on 8/8/01 (NS) (bz). (Entered: 08/09/2001)

09-06-2001 ORDER GRANTING UNITED STATES' AND DENYING WASHINGTON'S MOTIONS FOR JUDGMENT by Judge Barbara J. Rothstein. The court concludes that WA's motion for judgment on the pleadings is without merit, and that motion is DENIED [43-1] in 2:01-sp-00001. For the reasons set forth in the order, the Court GRANTS the USA's motion to strike affirmative defenses or for jdgmnt on pleadings [36-1] in 2:01-sp-00001. The court finds that 15 of WA's affirmative defenses are insufficient as a matter of law. Those affirmative defenses are hereby STRICKEN from

WA's answer. (cc: 9213 counsel, BJR) (NS) (Entered: 09/06/2001)

10-26-2001 ORDER GRANTING UNITED STATES' MOTION FOR RECONSIDERATION AND MOTION TO DISMISS STATE'S CROSS-REQUEST FOR DETERMINATION by Judge Barbara J. Rothstein GRANTING motion for reconsideration of court's order denying motion to dismiss [69-1] in 2:01-sp-00001 (cc: 9213 counsel, BJR) (NS) (Entered: 10/26/2001)

03-27-2002 STIPULATION and ORDER DIRECTING NEGOTIATION OF THE COORDINATED PLAN TO REPAIR CULVERTS, AND AMENDING SCHEDULING ORDER by Judge Barbara J. Rothstein: It is hereby ordered that the US, Tribes, and State of WA shall enter into negotiations to address the issues set out in paragraph 2 of the incorporated Stipulation and they shall submit the agreements reached within 6 months from the date of this Order or advise the Court that negotiations have reached an impasse. The State of WA's Motion for Leave to Set Up Counterclaim By Amendment is hereby stricken with leave to renote. The Pretrial Schedule of 7/10/01 shall be amended as follows: discovery ddl continued to 11/22/02 in 2:01-sp-00001; trial set for 12/2/03 (or as set in Pretrial Conference) in 2:01-sp-00001; Disclose Rebuttal Expert Witnesses by 4/4/03 in

2:01-sp-00001; Dispositive Motions to be filed by 3/28/03 in 2:01-sp-00001; The week of May 27/June 2, 2003, Pretrial Conf. to set trial deadlines and finalize the trial date. October/November 2003 Final Pretrial Conf (as set by the Court) The parties shall provide a progress report to the Court in 90 days. See order for specifics on all deadlines (cc: 9213 counsel, BJR) (NS) (Entered: 03/27/2002)

11-22-2004 REPLY, filed by Defendant WA State of, TO RESPONSE to 17784 MOTION for Leave to File *Leave to Set Up Counterclaim by Amendment and Argument in Support* (Attachments: # 1 # 2 # 3 Exhibit Exhibit A with Cover and Report # 4 Exhibit Ex A with App 1 and 2 # 5 Exhibit Ex A with App 3, 4, and 5 # 6 Exhibit Exhibit B # 7 Exhibit Exhibit C) (Woods, Fronda) (Entered: 11/22/2004)

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08-14-2006 DECLARATION of Paul J. Wagner In Support filed by Defendant WA State of re 18552 MOTION for Summary Judgment *and Argument in Support* (Attachments: # 1 # 2 # 3 # 4 # 5 # 6 # 7 # 8 # 9 # 10) (Woods, Fronda) (Entered: 08/14/2006)

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08-14-2006 DECLARATION of ROBERT THOMAS BOYD filed by Intervenor Plaintiffs Hoh Indian Tribe, Jamestown Band Clallam, Lower Elwha Klallam Tribe, Lummi Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Port Gamble Band Clallam, Puyallup Tribe of Indians, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe re 18560 MOTION for Summary Judgment (Sledd, John) (Entered: 08/14/2006)

08-14-2006 DECLARATION of KEITH LUTZ filed by Intervenor Plaintiffs Hoh Indian

Tribe, Jamestown Band Clallam, Lower Elwha Klallam Tribe, Lummi Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Port Gamble Band Clallam, Puyallup Tribe of Indians, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe re 18560 MOTION for Summary Judgment (Sledd, John) (Entered: 08/14/2006)

08-14-2006 DECLARATION of RONALD McFARLANE filed by Intervenor Plaintiffs Hoh Indian Tribe, Jamestown Band Clallam, Lower Elwha Klallam Tribe, Lummi Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Port Gamble Band Clallam, Puyallup Tribe of Indians, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe re 18560 MOTION for Summary Judgment (Sledd, John) (Entered: 08/14/2006

08-14-2006 DECLARATION of JOHN C. SLEDD filed by Intervenor Plaintiffs Hoh Indian Tribe, Jamestown Band Clallam, Lower Elwha Klallam Tribe, Lummi Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Port Gamble Band Clallam, Puyallup Tribe of Indians, Sauk-Suiattle Tribe, Skokomish Indian

Tribe, Squaxin Island, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe re 18560 MOTION for Summary Judgment (Sledd, John) (Entered: 08/14/2006)

09-27-2006 RESPONSE, by Defendant WA State of, to 18560 MOTION for Summary Judgment. (Attachments: #1 Decl of Baker #2 Decl of Mary E. Jones #3 Decl Jones Fox #4 Decl Jones Klochak #5 Decl Jones Ladley #6 Decl Jone McHenry #7 Decl Jone Rawson #8 Decl Jones Rogs #9 Decl Jones Table #10 Decl Jones Wasserman April #11 Decl Jones Wasserman June #12 Decl Jones Zischke) (Woods, Fronda) (Entered: 09/27/2006)

09-27-2006 RESPONSE, by Plaintiff United States of America, to 18552 MOTION for Summary Judgment *and Argument in Support*. (Attachments: # 1 Certificate of Service) (Monson, Peter) (Entered: 09/27/2006)

09-27-2006 RESPONSE, by Intervenor Plaintiff Nez Perce Tribe of Idaho, to 18552 MOTION for Summary Judgment *and Argument in Support*. Oral Argument Requested. (Cummings, David) (Entered: 09/27/2006)

09-27-2006 RESPONSE, by Intervenor Plaintiffs Hoh Indian Tribe, Jamestown Band Clallam, Lower Elwha Klallam Tribe, Lummi Tribe, Makah Indian Tribe, Muckleshoot Indian Tribe, Nisqually

Indian Tribe, Nooksack Indian Tribe of Washington, Port Gamble Band Clallam, Puyallup Tribe of Indians, Quileute Indian Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe, Upper Skagit Tribe, and the Confederated Bands and Tribes of the Yakama Nation to 18552 MOTION for Summary Judgment *and Argument in Support.* (Attachments: #1 LaSarte-Meeks Declaration #2 Certificate of Service) (Sledd, John) Modified on 9/28/2006 (NS,). Modified on 9/29/2006 (NS,). (Entered: 09/27/2006)

10-11-2006 REPLY, filed by Defendant WA State of, TO RESPONSE to 18552 MOTION for Summary Judgment *and Argument in Support* (Attachments: #1 4th Decl Mary E Jones #2 Attch Barber #3 Attch Benson #4 Attch Haring #5 Attch Wagner May 06 #6 Attch Wagner June 06) (Woods, Fronda) (Entered: 10/11/2006)

10-11-2006 REPLY, filed by Intervenor Plaintiffs Hoh Indian Tribe, Jamestown Band Clallam, Lower Elwha Klallam Tribe, Lummi Tribe, Makah Indian Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Nooksack Indian Tribe of Washington, Port Gamble Band Clallam, Puyallup Tribe of Indians, Quileute

Indian Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe, Upper Skagit Tribe, Confederated Tribes and Bands of the Yakama Indian Nation, TO RESPONSE to 18552 MOTION for Summary Judgment *and Argument in Support* (Attachments: #1 Declaration of John Sledd #2 Certificate of Service) (Sledd, John) (Entered: 10/11/2006)

01-29-2007 STIPULATION OF PLAINTIFFS AND STATE OF WASHINGTON REGARDING SCOPE OF SUBPROCEEDING, AND ORDER. See orders for specifics. by Judge Ricardo S Martinez. (NS,) (Entered: 01/29/2007)

08-22-2007 ORDER ON CROSS-MOTIONS FOR SUMMARY JUDGMENT. DENYING (287) the State of WA's Motion for Summary Judgment; GRANTING (295) the Tribes' Motion for Summary Judgment in case 2:01-sp-00001-RSM; DENYING (18552) the State of WA's Motion for Summary Judgment; GRANTING (18560) the Tribes' Motion for Summary Judgment in case 2:70-cv-09213-RSM in case 2:01-sp-00001-RSM Status Conference set for 8/29/2007 at 01:30 PM before Hon. Ricardo S Martinez. by Judge Ricardo S Martinez. (NS,) (Entered: 08/22/2007)

08-23-2007	AMENDED/CORRECTED ORDER ON CROSS-MOTIONS FOR SUMMARY JUDGMENT 18560 18552 287 295 The amended order corrects the inadvertent omission of the Muckleshoot Indian Tribe from the list of Tribes filing or joining in the Request for Determination by Judge Ricardo S Martinez. (NS,) (Entered: 08/23/2007)
08-27-2007	WITHDRAWAL of Motion re (387 in 2:01-sp-00001-RSM, 18874 in 2:70-cv-09213-RSM) MOTIONS IN LIMINE ; by Defendant WA State of. (Woods, Fronda) (Entered: 08/27/2007)
08-27-2007	WITHDRAWAL of Motion re (18873 in 2:70-cv-09213-RSM, 386 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE *re: Moderate Living*; by Plaintiffs Stillaguamish Tribe, Upper Skagit Tribe, Tulalip Tribe, Lummi Indian Nation, Quinault Indian Nation, Puyallup Tribe, Hoh Tribe, Confederated Tribes and Bands of the Yakama Indian Nation, Quileute Indian Tribe, Suquamish Indian Tribe, Makah Nation, Swinomish Tribal Community, Muckleshoot Indian Tribe, Jamestown S'Klallam Tribe, Lower Elwha Band of Klallams, Port Gamble Band Clallam, Nisqually Indian Tribe, Nooksack Tribe, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe. (Sledd, John) (Entered: 08/27/2007)

09-14-2009 MOTIONS IN LIMINE *RE Martin Fox Study* by Defendant WA State of. (Attachments: #1 Proposed Order, #2 Declaration of Fronda Woods In Support of Motion, #3 Certificate of Service) Noting Date 10/2/2009, (Woods, Fronda) (Entered: 09/14/2009)

09-14-2009 MOTIONS IN LIMINE *RE Fish Production From State Culverts* by Defendant WA State of. (Attachments: #1 Proposed Order, #2 Declaration of Fronda Woods with Documents in Support, #3 Certificate of Service) Noting Date 10/2/2009, (Woods, Fronda) (Entered: 09/14/2009)

09-17-2009 Joint MOTIONS IN LIMINE *to Exclude Expert Smelser* by Plaintiff Lummi Indian Nation. (Attachments: #1 Proposed Order) Noting Date 10/2/2009, (Johnsen, Harry) (Entered: 09/17/2009)

09-17-2009 DECLARATION of Harry L. Johnsen filed by Plaintiff Lummi Indian Nation re (574 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Attachments: #1 Pages 6-33 of Declaration, #2 Pages 34-68 of Declaration, #3 Pages 69-82 of Declaration, #4 Pages 83-107 of Declaration) (Johnsen, Harry) (Entered: 09/17/2009)

09-24-2009 Exhibit List *Stipulation re: Treaty and Non-Treaty Harvest Data* by Intervenor Plaintiff Puyallup Tribe of Indians. (Stiltner, Samuel) (Entered: 09/24/2009)

09-28-2009 RESPONSE, by Plaintiff Muckleshoot Indian Tribe, to (572 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE. (Attachments: # 1 Declaration of Alan Stay pp 1-47, # 2 Declaration of Alan Stay pp 48-86, # 3 Declaration of Martin Fox) (Otsea, Robert) (Entered: 09/28/2009)

09-28-2009 RESPONSE, by Plaintiff Lummi Indian Nation, to (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE. (Johnsen, Harry) (Entered: 09/28/2009)

09-28-2009 DECLARATION of Lauren Rasmussen filed by Plaintiff Lummi Indian Nation re (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Johnsen, Harry) (Entered: 09/28/2009)

09-28-2009 DECLARATION of Andris Rankis filed by Plaintiff Lummi Indian Nation re (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Johnsen, Harry) (Entered: 09/28/2009)

09-28-2009 RESPONSE, by Defendant WA State of, to (574 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE. (Shaftel, Douglas) (Entered: 09/28/2009)

09-28-2009 DECLARATION of Kit Rawson filed by Plaintiff Lummi Indian Nation re (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Johnsen, Harry) (Entered: 09/28/2009)

09-28-2009 DECLARATION of David Smelser filed by Defendant WA State of re (574 in 2:01-sp-00001-RSM) MOTIONS IN

LIMINE (Shaftel, Douglas) (Entered: 09/28/2009)

09-28-2009 DECLARATION of Michael Barber filed by Defendant WA State of re (574 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Shaftel, Douglas) (Entered: 09/28/2009)

09-28-2009 DECLARATION of Eric Warner filed by Plaintiff Lummi Indian Nation re (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Johnsen, Harry) (Entered: 09/28/2009)

09-28-2009 DECLARATION of William Beattie filed by Plaintiff Lummi Indian Nation re (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Johnsen, Harry) (Entered: 09/28/2009)

09-28-2009 DECLARATION of Douglas D. Shaftel filed by Defendant WA State of re (574 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Shaftel, Douglas) (Entered: 09/28/2009)

09-28-2009 DECLARATION of Robert Hayman filed by Plaintiff Lummi Indian Nation re (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Attachments: #1 Exhibit, #2 Exhibit, #3 Exhibit, #4 Exhibit, #5 Exhibit, #6 Exhibit)(Johnsen, Harry) Modified on 9/29/2009 (NS).(NOTE: document filed with duplicated pages; refiled correctly as docket #593) (Entered: 09/28/2009)

09-28-2009 DECLARATION of Eric Beamer filed by Plaintiff Lummi Indian Nation re (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Attachments: #1 Exhibit) (Johnsen, Harry) (Entered: 09/28/2009)

09-29-2009 DECLARATION of Robert Hayman filed by Plaintiff Lummi Indian Nation re (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Attachments: #1 Attachment 1, #2 Attachment 2, #3 Attachment 3, #4 Attachment 4, #5 Attachment 5) (Johnsen, Harry) (Entered: 09/29/2009)

10-02-2009 REPLY, filed by Defendant WA State of, TO RESPONSE to (572 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Attachments: # 1 Ferester Dec re Fox MIL Reply) (Woods, Fronda) (Entered: 10/02/2009)

10-02-2009 REPLY, filed by Defendant WA State of, TO RESPONSE to (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Attachments: #1 Woods Declaration re Daubert Reply, #2 Certificate of Service Certificate of Service re Daubert Reply) (Woods, Fronda) (Entered: 10/02/2009)

10-02-2009 REPLY, filed by Plaintiff Lummi Indian Nation, TO RESPONSE to (574 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE (Attachments: #1 Second Declaration of Harry Johnsen) (Johnsen, Harry) (Entered: 10/02/2009)

10-08-2009 ORDER ON MOTIONS IN LIMINE, This matter is before the Court for

consideration of the parties three motions in limine. In case SP01-1RSM: DENYING (572) Motion in Limine; GRANTING (573) Motion in Limine; GRANTING (574) Motion in Limine; CV70-9213: denying (19358) Motion in Limine; granting (19359) Motion in Limine; granting (19360) Motion in Limine - SEE ORDER FOR FURTHER DESCRIPTION. by Judge Ricardo S Martinez.(SA) (Entered: 10/08/2009)

10-13-2009 TRIAL BRIEF by Defendant WA State of. (Shaftel, Douglas) (Entered: 10/13/2009)

10-13-2009 TRIAL BRIEF *PLAINTIFF TRIBES' TRIAL BRIEF* by Plaintiffs Stillaguamish Tribe, Upper Skagit Tribe, Tulalip Tribe, Lummi Indian Nation, Puyallup Tribe, Hoh Tribe, Confederated Tribes and Bands of the Yakama Indian Nation, Quileute Indian Tribe, Suquamish Indian Tribe, Makah Nation, Swinomish Tribal Community, Muckleshoot Indian Tribe, Jamestown S'Klallam Tribe, Lower Elwha Band of Klallams, Port Gamble Band Clallam, Nisqually Indian Tribe, Nooksack Tribe, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Quinault Indian Nation. (Sledd, John) (Entered: 10/13/2009)

10-13-2009 MINUTE ENTRY for proceedings held before Judge Ricardo S Martinez- Dep Clerk: *Laurie Cuaresma*; Pla Counsel:

John Sledd, Alan Stay, Alix Foster, Tim Weaver, Mason Morisset, Lauren Rasmussen, John Hollowed, Peter Monson, Yale Lewis, Katherine Krueger, Laura Sagolla, Brian Gruber, Harold Chesnin, Sam Stiltner, Eric Nielsen, Tom Zielman, Bruce Davies; Def Counsel: *Rene Tomisser, Fronda Woods, Doug Shaftel, Phil Ferester*; CR: *Barry Fanning*; Time of Hearing: *9:00 AM*; Session #: *DAY 1*;BENCH TRIAL held on 10/13/2009. Counsel make opening statements. Plaintiff calls: CHARLENE KRISE, LORRAINE LOOMIS, LAWRENCE JAY WASSERMAN, MICHAEL McHENRY. Exhibits admitted. Bench trial will resume on 10/14/09 at 9:00 AM. (LC) (Entered: 10/13/2009)

10-14-2009 PRETRIAL ORDER, Subproceeding 01-1, In Re: Culverts by Judge Ricardo S Martinez. (NS) (Entered: 10/14/2009)

10-14-2009 MINUTE ENTRY for proceedings held before Judge Ricardo S. Martinez- Dep Clerk: *Lowell Williams*; Pla Counsel: *John Sledd, Alan Stay, Alix Foster, Tim Weaver, Mason Morisset, Lauren Rasmussen, John Hollowed, Peter Monson, Yale Lewis, Katherine Krueger, Laura Sagolla, Brian Gruber, Harold Chesnin, Sam Stiltner, Eric Nielsen, Tom Zielman, Bruce Davies*; Def Counsel: *Rene Tomisser, Fronda Woods, Doug Shaftel, Phil Ferester*; CR: *Barry*

Fanning; Time of Hearing: *9:00 AM*; Courtroom: *13206*; Bench Trial held on 10/14/2009. MICHAEL McHENRY resumes stand on cross-exam. MARTIN FOX, KIT RAWSON and KAREN WALTER sworn and testify. Exhibits admitted. (LW) (Entered: 10/14/2009

10-15-2009 MINUTE ENTRY for proceedings held before Judge Ricardo S. Martinez- Dep Clerk: *Lowell Williams*; Pla Counsel: *John Sledd, Alan Stay, Alix Foster, Tim Weaver, Mason Morisset, Lauren Rasmussen, John Hollowed, Peter Monson, Yale Lewis, Katherine Krueger, Laura Sagolla, Brian Gruber, Harold Chesnin, Sam Stiltner, Eric Nielsen, Tom Zielman, Bruce Davies*; Def Counsel: *Rene Tomisser, Fronda Woods, Doug Shaftel, Phil Ferester*; CR: *Barry Fanning*; Time of Hearing: *9:00 Am*; Courtroom: *13206*;Bench Trial held on 10/15/2009. Defendants respond to plaintiffs' offer of proof and call PAUL SEKULICH. TYSON WALDO, PHILIP MEYER, RANDOLPH KINLEY and EDWARD JOHNSTONE sworn and testify. Plaintiffs rest. Defendants call PAUL SEKULICH. Exhibits admitted. Bench trial to resume October 19, 2009 at 9:00 AM. (LW) (Entered: 10/15/2009)

10-16-2009 MEMORANDUM filed by Plaintiff Tulalip Tribe re (573 in 2:01-sp-00001-RSM) MOTIONS IN LIMINE Treaty Tribes' Bench Memo Re Revised &

Redacted Written Direct Testimony (Morisset, Mason) (Entered: 10/16/2009)

10-19-2009 MINUTE ENTRY for proceedings held before Judge Ricardo S Martinez- Dep Clerk: *Laurie Cuaresma*; Pla Counsel: *John Sledd, Alan Stay, Alix Foster, Tim Weaver, Mason Morisset, Lauren Rasmussen, John Hollowed, Peter Monson, Yale Lewis, Katherine Krueger, Laura Sagolla, Brian Gruber, Harold Chesnin, Sam Stiltner, Eric Nielsen, Tom Zeilman, Bruce Davies*; Def Counsel: *Doug Shaftel, Rene Tomisser, Fronda Woods, Phil Ferester*; CR: *Barry Fanning*; Time of Hearing: *9:00 AM*; Bench Trial held on 10/19/2009. Defense witnesses called: PAUL WAGNER, MICHAEL BARBER sworn and testify. Exhibits entered. Bench trial will resume on 10/20/09 at 9:00 A.M. (LC) (Entered: 10/19/2009)

10-20-2009 MINUTE ENTRY for proceedings held before Judge Ricardo S Martinez- Dep Clerk: *Laurie Cuaresma*; Pla Counsel: *John Sledd, Alan Stay, Alix Foster, Mason Morisset, Lauren Rasmussen, John Hollowed, Peter Monson, Yale Lewis, Katherine Krueger, Laura Sagolla, Brian Gruber, Harold Chesnin, Sam Stiltner, Eric Nielsen, Tom Zeilman*; Def Counsel: *Fronda Woods, Phil Ferester, Renee Tomisser, Doug Shaftel*; CR: *Barry Fanning*; Time of Hearing: *9:00 AM*; Courtroom: *13206*;

	Bench Trial - DAY 5 held on 10/20/2009. Def witnesses called: MICHAEL BARBER, ALEX NAGYGYOR, ROBERT BARNARD, ALLISON HANSON sworn and testify. Exhibits admitted. Bench trial will continue on Friday 10/23/09 at 9:00 AM. Court is in recess. (LC) (Entered: 10/20/2009)
10-23-2009	MINUTE ENTRY for proceedings held before Judge Ricardo S. Martinez- Dep Clerk: *Lowell Williams*; Pla Counsel: *John Sledd, Alan Stay, Alix Foster, Mason Morisset, Lauren Rasmussen, John Hollowed, Peter Monson, Yale Lewis, Katherine Krueger, Laura Sagolla, Brian Gruber, Harold Chesnin, Sam Stiltner, Eric Nielsen, Tom Zeilman*; Def Counsel: *Fronda Woods, Phil Ferester, Renee Tomisser, Doug Shaftel*; CR: *Barry Fanning*; Time of Hearing: *9:00 AM*; Courtroom: *13206*; Bench Trial - Day 6 held on 10/23/2009. ALLISON HANSON resumes stand on cross-examination. JEFFREY KOENINGS and BRIAN BENSON sworn and testify. Exhibits admitted. Bench trial will resume October 26, 2009 at 9:00 AM. (LW) (Entered: 10/23/2009)
10-26-2009	MINUTE ENTRY for proceedings held before Judge Ricardo S Martinez- Dep Clerk: *Laurie Cuaresma*; Pla Counsel: *John Sledd, Alan Stay, Alix Foster, Mason Morisset, Lauren Rasmussen, John Hollowed, Peter Monson, Yale*

	Lewis, Katherine Krueger, Laura Sagolla, Brian Gruber, Harold Chesnin, Sam Stiltner, Eric Nielsen, Tom Zeilman; Def Counsel: *Rene Tomisser, Fronda Woods, Doug Shaftel, Phil Ferester*; CR: *Nancy Bauer*; Time of Hearing: ***9:00 AM***; Courtroom: ***13206***; BENCH TRIAL - DAY 7 held on 10/26/2009. Def calls: VICTOR MOORE, JEFF CARPENTER. Exhibits entered. Def rests. Pla calls rebuttal witness: DR. PHILIP RONI. Testimony is concluded. Submissions regarding evidentiary disputes to be filed by 11/9/09; proposed Findings of Fact and Conclusions of Law to be filed by the parties by 12/11/09. Closing arguments to be set at a later date. (LC) (Entered: 10/26/2009)
10-26-2009	PLAINTIFF TRIBES' BENCH MEMORANDUM RE: ADMISSIBILITY OF CERTAIN EXHIBITS PROPOSED BY TRIBES by Plaintiff Swinomish Tribal Community. (Attachments: #1 Exhibit Trial Bench Memorandum Appendix 1-3, #2 Exhibits Trial Bench Memorandum Appendix 4 & 5) (SA) (Entered: 10/27/2009)
11-24-2009	ORDER ON MOTION TO ADMIT EXHIBITS This matter is before the Court for consideration of plaintiff Tribes' motion to admit certain exhibits made during the bench trial in this matter (9213 dkt #19423; 01-1 dkt #624), and the Court directed the parties to

	complete briefing on the issue post-trial. This Court's ruling on the admissibility of the exhibits will guide the parties in preparing their Findings of Fact and Conclusions of Law, as directed by the Court on 10/26/2009. The Tribes' motion to admit evidence is GRANTED, and the exhibits listed in the Tribes' memorandum (Dkt #624), with the exception of Exhibit AT-235 which has been withdrawn (Dkt #626), shall be admitted. The parties shall confer and arrange a time for a representative to meet the Courtroom Deputy to review exhibits and conform them to the Court's rulings on admissibility. by Judge Ricardo S Martinez. (NS) (Entered: 11/24/2009)
12-16-2009	STIPULATED MOTION AND ORDER GRANTING MOTION (dkt#641 in case 2:01-sp-00001-RSM; dkt #19462 in case 2:70-cv-09213-RSM) IT IS HEREBY ORDERED THAT Exhibits AT-004-4 and AT-004-5 be withdrawn from evidence in this case. by Judge Ricardo S Martinez. (NS) (Entered: 12/16/2009)
01-29-2010	Proposed Findings of Fact by Defendant WA State of (Woods, Fronda) (Entered: 01/29/2010)
01-29-2010	MOTION for Findings of Fact & Conclusions of Law by Plaintiffs Stillaguamish Tribe, Upper Skagit Tribe, Tulalip Tribe, Lummi Indian Nation, Quinault Indian Nation,

Puyallup Tribe, Hoh Tribe, Confederated Tribes and Bands of the Yakama Indian Nation, Quileute Indian Tribe, Suquamish Indian Tribe, Makah Nation, Swinomish Tribal Community, United States of America, Muckleshoot Indian Tribe, Jamestown S'Klallam Tribe, Lower Elwha Band of Klallams, Port Gamble Band Clallam, Nisqually Indian Tribe, Nooksack Tribe, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe. (01-sp-01RSM) (Attachments: #1 Plaintiffs' Proposed Conclusions of Law) Noting Date 1/29/2010, (Sledd, John) Modified on 3/14/2012 (CL). (Entered: 01/29/2010)

01-29-2010 MOTION for Permanent Injunction by Plaintiffs Stillaguamish Tribe, Upper Skagit Tribe, Tulalip Tribe, Lummi Indian Nation, Quinault Indian Nation, Puyallup Tribe, Hoh Tribe, Confederated Tribes and Bands of the Yakama Indian Nation, Quileute Indian Tribe, Suquamish Indian Tribe, Makah Nation, Swinomish Tribal Community, United States of America, Muckleshoot Indian Tribe, Jamestown S'Klallam Tribe, Lower Elwha Band of Klallams, Port Gamble Band Clallam, Nisqually Indian Tribe, Nooksack Tribe, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe. (01-sp-01RSM) Noting Date 1/29/2010, (Sledd, John) Modified on 3/14/2012 (CL). (Entered: 01/29/2010)

02-02-2010	MINUTE ORDER The State's Motion to ADMIT EXHIBIT W-089 in case 2:01-sp-00001-RSM (dkt #642); case 2:70-cv-09213-RSM (dkt #19465), is GRANTED. The Court will consider the Tribe's objections in determining what weight to accord Mr. Barnard's opinions. by Judge Ricardo S Martinez. (NS) (Entered: 02/02/2010)
02-05-2010	NOTICE *United States' Joinder in Plaintiff's Post-Trial Brief* ; filed by Plaintiff United States of America. (Monson, Peter) (Entered: 02/05/2010)
02-05-2010	TRIAL BRIEF *(Post Trial)* by Defendant WA State of. (Tomisser, Rene) (Entered: 02/05/2010)
02-12-2010	TRIAL BRIEF *Tribal Post-Trial Brief (Corrected)* by Intervenor Plaintiff Puyallup Tribe of Indians. (Stiltner, Samuel) (Entered: 02/12/2010)
06-07-2010	MINUTE ENTRY for proceedings held before Judge Ricardo S Martinez- Dep Clerk: *Laurie Cuaresma*; Pla Counsel: *John Sledd, Alan Stay, Alix Foster, Mason Morisset, Lauren Rasmussen, John Hollowed, Peter Monson, Yale Lewis, Katherine Krueger, Brian Gruber, Sam Stiltner, Tom Zeilman, Dan Raas, Kevin Lyon, Mary Neil, Michelle Hansen, Richard Reich, Howard Arnett*; Def Counsel: *Rene Tomisser, Fronda Woods, Doug Shaftel, Phil Ferester*; CR: *Barry Fanning*; Time of Hearing: *1:30 PM*; In Court Hearing held on 6/7/2010. Court

	hears CLOSING ARGUMENT of counsel and takes matter under advisement. (LC) (Entered: 06/07/2010)
01-11-2013	ORDER ON SUPPLEMENTAL BRIEFING by Judge Ricardo S Martinez. The parties are directed to file supplemental memoranda, together with relevant exhibits, presenting any new and relevant facts which should be brought to the Court's attention. The memoranda, limited to twenty pages each, shall be filed on or before February 1, 2013. Any accompanying declarations and attached exhibits shall be limited to forty pages in total. No rebuttal materials may be filed. (CL) (cc: Clam Acres) (Entered: 01/11/2013)
02-01-2013	MEMORANDUM *United States' Supplemental Post-Trial Memorandum* by Plaintiff United States of America. (Monson, Peter) (Entered: 02/01/2013)
02-01-2013	DECLARATION *of Yvonne M. Marsh to US' Supplemental Post-Trial Memorandum* by Plaintiff United States of America. (Attachments: #1 Exhibit 1, #2 Exhibit 2, #3 Exhibit 3, #4 Exhibit 4, #5 Exhibit 5, #6 Exhibit 6)(Monson, Peter) (Entered: 02/01/2013)
02-01-2013	DECLARATION *of Steven Landino to US' Supplemental Post-Trial Memorandum* by Plaintiff United States of America. (Monson, Peter) (Entered: 02/01/2013)

02-01-2013	*State of Washington's Supplemental* BRIEF by Defendant WA State of. (Tomisser, Rene) (Entered: 02/01/2013)
02-01-2013	DECLARATION of Rene Tomisser re 738 Brief by Defendant WA State of. (Tomisser, Rene) (Entered: 02/01/2013)
02-01-2013	DECLARATION of Alex Nagygyor re 738 Brief by Defendant WA State of. (Tomisser, Rene) (Entered: 02/01/2013)
02-01-2013	DECLARATION of Candace Espeseth re 738 Brief by Defendant WA State of. (Tomisser, Rene) (Entered: 02/01/2013)
02-01-2013	DECLARATION of Deborah Petersen re 738 Brief by Defendant WA State of. (Tomisser, Rene) (Entered: 02/01/2013)
02-01-2013	DECLARATION of Robert Barnard re 738 Brief by Defendant WA State of. (Tomisser, Rene) (Entered: 02/01/2013)
02-01-2013	DECLARATION of Julie Henning re 738 Brief by Defendant WA State of. (Tomisser, Rene) (Entered: 02/01/2013)
02-01-2013	DECLARATION of Jay Alexander re 738 Brief by Defendant WA State of. (Tomisser, Rene) (Entered: 02/01/2013)
02-01-2013	DECLARATION of Paul Wagner re 738 Brief by Defendant WA State of. (Tomisser, Rene) (Entered: 02/01/2013)
02-01-2013	*Tribal Supplemental* BRIEF *Regarding Post-Trial Events and the Need for Injunctive Relief* by Plaintiffs Confederated Tribes and Bands of the Yakama Indian Nation, Hoh Tribe, Jamestown S'Klallam Tribe, Lower

Elwha Band of Klallams, Lummi Indian Nation, Makah Nation, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Nooksack Tribe, Port Gamble Band Clallam, Puyallup Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe. (Sledd, John) (Entered: 02/01/2013)

02-01-2013 DECLARATION of Alix Foster by Plaintiffs Confederated Tribes and Bands of the Yakama Indian Nation, Hoh Tribe, Jamestown S'Klallam Tribe, Lower Elwha Band of Klallams, Lummi Indian Nation, Makah Nation, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Nooksack Tribe, Port Gamble Band Clallam, Puyallup Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe. (Sledd, John) (Entered: 02/01/2013)

02-01-2013 DECLARATION of Keith Lutz by Plaintiffs Confederated Tribes and Bands of the Yakama Indian Nation, Hoh Tribe, Jamestown S'Klallam Tribe, Lower Elwha Band of Klallams, Lummi Indian Nation, Makah Nation, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Nooksack Tribe, Port

Gamble Band Clallam, Puyallup Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe. (Sledd, John) (Entered: 02/01/2013)

02-06-2013 PRAECIPE re 748 Brief, *Plaintiff Tribes' Post-Trial Supplemental Brief* by Plaintiffs Confederated Tribes and Bands of the Yakama Indian Nation, Hoh Tribe, Jamestown S'Klallam Tribe, Lower Elwha Band of Klallams, Lummi Indian Nation, Makah Nation, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Nooksack Tribe, Port Gamble Band Clallam, Puyallup Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Tribal Community, Tulalip Tribe. (Sledd, John) (Entered: 02/06/2013)

03-29-2013 ORDER by Judge Ricardo S. Martinez. The Court GRANTS the Tribes' motion for a Permanent Injunction in 01-sp-01RSM docket no. 6[illegible], in 70-cv-9213RSM, docket no. 19508. (CL) (cc: Clam Acres) (Entered: 03/29/2013)

03-29-2013 PERMANENT INJUNCTION RE-GARDING CULVERT (01-sp-01RSM) CORRECTION by Judge Ricardo S Martinez. (CL) (cc: Clam Acres) (Entered: 03/29/2013)

04-01-2013	ORDER: SUPPLEMENT TO MEMORANDUM AND DECISION by Judge Ricardo S Martinez. The attached documents, Attachment A and B, were referred to in the Court's Memorandum and Decision filed March 29, 2012. Dckt. #752, (Attachments: #(1) Exhibit A, #(2) Exhibit B) (CL) (cc: Clam Acres) (Entered: 04/01/2013)
04-01-2013	NOTICE of Corrected Image/Document re (754 in 2:01-sp-00001-RSM, 20387 in 2:70-cv-09213-RSM) Order, (Service of corrected image is attached). (Attachments: #1 Exhibit A, #2 Exhibit B) (CL) (Entered: 04/01/2013)
05-28-2013	NOTICE OF APPEAL (13-35474) to Ninth Circuit by Defendant WA State of. (Purcell, Noah) Modified on 5/28/2013; Filing Fee Paid in main case; 70-CV-9213; Receipt No: 0981-3221568. (LMK). Modified on 5/29/2013, ADD CCA# (SA). (Entered: 05/28/2013)
09-27-2013	NOTICE of Filing Lists of Barrier Culverts ; filed by Defendant WA State of. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5) (Shorin, Joseph) (Entered: 09/27/2013)

RELEVANT DOCKET ENTRIES

U.S. Ninth Circuit Court of Appeals
Docket No. 13-35474

10-07-2013 Submitted (ECF) First Brief on Cross-Appeal for review. Submitted by Appellant State of Washington in 13-35474, Appellee State of Washington in 13-35519. Date of service: 10/07/2013. [8812577] [13-35474, 13-35519]--[COURT UPDATE: Edited docket text to reflect correct brief type. Resent NDA. 10/10/2013 by RY] (Watson, Laura) [Entered: 10/07/2013 05:37 PM]

10-09-2013 Submitted (ECF) excerpts of record. Submitted by Appellant State of Washington in 13-35474, Appellee State of Washington in 13-35519. Date of service: 10/09/2013. [8816274] [13-35474, 13-35519] (Watson, Laura) [Entered: 10/09/2013 04:15 PM]

10-11-2013 Submitted (ECF) Amicus brief for review (by government or with consent per FRAP 29(a)). Submitted by Washington State Association of Counties. Date of service: 10/11/2013. [8819771] [13-35474, 13-35519] --[COURT UPDATE: Attached corrected brief. Resent NDA. 10/16/2013 by RY] (Loginsky, Pamela) [Entered: 10/11/2013 04:31 PM]

10-15-2013 Submitted (ECF) Amicus Brief for review. Submitted by Amicus Curiae - Pending State Of Oregon. Date of

service: 10/15/2013. [8821166] (Striffler, Stephanie) [Entered: 10/15/2013 11:57 AM]

01-21-2014 Submitted (ECF) Answering Brief for review. Submitted by Appellee USA in 13-35474, - USA in 13-35519. Date of service: 01/21/2014. [8945937] [13-35474, 13-35519] (Shilton, David) [Entered: 01/21/2014 03:25 PM]

01-21-2014 Submitted (ECF) Second Brief on Cross-Appeal and supplemental excerpts of record for review. Submitted by Appellees Confederated Tribes and Bands of the Yakama Indian Nation, Hoh Tribe, Jamestown S'Klallam Tribe, Lower Elwha Band of Klallams, Lummi Indian Nation, Makah Indian Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Nooksack Indian Tribe, Port Gamble Band Clallam, Puyallup Tribe, Quileute Indian Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Indian Tribal Community, Tulalip Tribes and Upper Skagit Indian Tribe in 13-35474. Date of service: 01/21/2014. [8946403] [13-35474, 13-35519]--[COURT UP-DATE: Edited docket text to reflect correct brief type. Removed duplicate excerpts (SER part 4). Resent NDA. 01/22/2014 by RY] (Sledd, John) [Entered: 01/21/2014 10:59 PM]

01-28-2014 Submitted (ECF) Amicus brief for review (by government or with consent per FRAP 29(a)). Submitted by Indian Law Professors. Date of service: 01/28/2014. [8956762]--[COURT UPDATE: Attached corrected brief and certificate of service. Resent NDA. 01/29/2014 by RY] (Routel, Colette) [Entered: 01/28/2014 07:08 PM]

01-29-2014 Submitted (ECF) Amicus brief for review (by government or with consent per FRAP 29(a)). Submitted by Pacific Coast Federation of Fishermen's Associations and Institute for Fisheries Resources. Date of service: 01/29/2014. [8958138] (Brimmer, Janette) [Entered: 01/29/2014 03:33 PM]

03-24-2014 Submitted (ECF) Reply Brief and further excerpts of record for review. Submitted by Appellant State of Washington. Date of service: 03/24/2014. [9029239] (Watson, Laura) [Entered: 03/24/2014 04:24 PM]

09-01-2015 FILED (ORIGINAL) CERTIFIED RECORD ON APPEAL. Record Part: Clerks Record, No. of Volumes: 4, Sealed: n. [9667567] (SOS) [Entered: 09/01/2015 10:55 AM]

10-16-2015 ARGUED AND SUBMITTED TO WILLIAM A. FLETCHER, RONALD M. GOULD and DAVID A. EZRA. [9721123] (SB) [Entered: 10/16/2015 12:01 PM]

06-27-2016 FILED OPINION (WILLIAM A. FLETCHER, RONALD M. GOULD and DAVID A. EZRA) AFFIRMED. Judge: WAF Authoring. FILED AND ENTERED JUDGMENT. [10029546] -- [Edited: Attached corrected PDF of opinion (clerical correction/typo). 06/27/2016 by TYL] (MM) [Entered: 06/27/2016 08:26 AM]

08-11-2016 Filed (ECF) Appellant State of Washington petition for panel rehearing and petition for rehearing en banc (from 06/27/2016 opinion). Date of service: 08/11/2016. [10086655]-- [COURT ENTERED FILING to correct entry [117].] (SLM) [Entered: 08/15/2016 10:37 AM]

08-22-2016 Submitted (ECF) Amicus brief for review (by government or with consent per FRAP 29(a)). Submitted by States of Idaho and Montana. Date of service: 08/22/2016. [10094731] [13-35474] (Smith, Clay) [Entered: 08/22/2016 09:17 AM]

08-22-2016 Submitted (ECF) Amicus brief for review and filed Motion to become amicus curiae. Submitted by Klamath Critical Habitat Landowners Inc., Modoc Point Irrigation District; Mosby Family Trust; Sprague River Water Resource Foundation, Inc., and TPC, LLC. Date of service: 08/22/2016. [10096797] -- [COURT ENTERED FILING to correct

entry [122] .]--[Edited: attached corrected motion and brief. 08/23/2016 by SLM]--[Edited: attached corrected brief. 08/23/2016 by SLM] (TYL) [Entered: 08/23/2016 10:29 AM]

08-25-2016 Filed clerk order (Deputy Clerk: OC): Appellees are directed to file a response to Appellant's Petition for Rehearing and Rehearing En Banc filed with this court on August 11, 2016. The response shall not exceed fifteen pages or 4200 words, and shall be filed within 21 days of the date of this order. Parties who are registered for Appellate ECF must file the response electronically without submission of papers copies. Parties who are not registered Appellate ECF filers must file the original response plus 50 paper copies. [10100199] (OC) [Entered: 08/25/2016 09:22 AM]

09-29-2016 Filed (ECF) Appellee USA response to petition for panel rehearing and petition for rehearing en banc. Date of service: 09/29/2016. [10142617]. [13-35474]--[COURT UPDATE: Updated docket text to reflect content of filing. 09/29/2016 by SLM] (Ying, Evelyn) [Entered: 09/29/2016 02:28 PM]

09-29-2016 Filed (ECF) Appellees Confederated Tribes and Bands of the Yakama Indian Nation, Hoh Tribe, Jamestown S'Klallam Tribe, Lower Elwha Band of Klallams, Lummi Indian Nation, Makah

Indian Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Nooksack Indian Tribe, Port Gamble Band Clallam, Puyallup Tribe, Quileute Indian Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Squaxin Island Tribe, Stillaguamish Tribe, Suquamish Indian Tribe, Swinomish Indian Tribal Community, Tulalip Tribes and Upper Skagit Indian Tribe response to Combo PFR Panel and En Banc (ECF Filing), Combo PFR Panel and En Banc (ECF Filing) for panel and en banc rehearing, for panel and en banc rehearing (statistical entry). Date of service: 09/29/2016. [10143302]. [13-35474] (Sledd, John) [Entered: 09/29/2016 07:52 PM]

03-02-2017 Filed order and amended opinion (WILLIAM A. FLETCHER, RONALD M. GOULD and DAVID A. EZRA). Amending Disposition Opinion AFFIRMED; The opinion filed on June 27, 2016 is amended as follows: (SEE ORDER FOR FULL TEXT) No new Petition for Panel Rehearing or Petition for Rehearing en Banc will be entertained. Pending petitions remain pending and need not be renewed. [10339453] (RMM) [Entered: 03/02/2017 07:00 AM]

05-19-2017 Filed Order for PUBLICATION (WILLIAM A. FLETCHER, RONALD M. GOULD and DAVID A. EZRA)

(Concurrence by Judge W. Fletcher; Opinion Respecting Denial by Judge O'Scannlain; Statement by Judge Hurwitz) The panel, as constituted above, has voted unanimously to deny the petition for panel rehearing. Judges Fletcher and Gould have voted to deny the petition for rehearing en banc, and Judge Ezra so recommends. A judge of the court called for a vote on the petition for rehearing en banc. A vote was taken, and a majority of the non recused active judges of the court failed to vote for en banc rehearing. Fed. R. App. P. 35(f). The petition for rehearing and the petition for rehearing en banc, filed August 11, 2016, are DENIED. [10440900] (RMM) [Entered: 05/19/2017 06:57 AM]

05-30-2017 MANDATE ISSUED.(WAF, RMG and DAE) [10451721] (RL) [Entered: 05/30/2017 10:43 AM]

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OFFICE OF ATTORNEY GENERAL
FISH & WILDLIFE DIVISION

HONORABLE JUDGE
BARBARA JACOBS ROTHSTEIN

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, v. STATE OF WASHINGTON, et al., Defendants.	Civil No. C70-9213 Sub-Proceeding No. 01-01 (Culverts) REQUEST FOR DETERMINATION

INTRODUCTION AND DESCRIPTION OF THE SUBPROCEEDING

The Tribes bring this subproceeding to enforce a duty upon the State of Washington to refrain from constructing and maintaining culverts under State roads that degrade fish habitat so that adult fish production is reduced, which in turn reduces the number of fish available for harvest by the Tribes. In part due to the reduction of harvestable fish caused by those actions of the State, the ability of the Tribes to achieve a moderate living from the Treaty fisheries has been impaired.

The Tribes seek mandatory relief requiring Washington to identify and then to open culverts under state roads and highway that obstruct fish passage, for fish runs returning to or passing through

the usual and accustomed grounds and stations of the plaintiff tribes.

I. PRELIMINARY MATTERS

1.1 Jurisdiction and venue are proper in this Court pursuant to the August 23, 1993 Order Modifying Paragraph 25 of Permanent Injunction.

1.2 A conference pursuant to modified Paragraph 25 was held on July 31, 2000, in accordance with a Request to Meet and Confer dated June 16, 2000, a copy of which is attached as Exhibit A. All parties were notified of this conference, and the defendants and a representative group of plaintiff-intervenors were present. No agreement was reached, although the parties agreed to exchange further positions.

1.3 On August 10, the State, pursuant to revised Paragraph 25(b)(2), demanded mediation.

1.4 In addition to demanding mediation, the State requested a 'government-to-government' meeting with tribal elected officials and Washington Governor Locke, Attorney General Gregoire, Transportation Director Morrison and other State officials. Tribal Chairs, Vice-chairs and other tribal officials from tribal plaintiff-intervenors attended. Governor Locke declared the parties at an impasse, and tribal officials agreed. Nonetheless the parties agreed to attend the mediation, and exchange further documents in preparation for the mediation.

1.5 The mediation took place in Seattle on October 26, 2000, from 9:00 a.m. until 3:00 p.m., with all parties represented. By agreement of the parties, former District of Oregon United States Attorney

Sidney Lezak served as the mediator. The parties were unable to reach an agreement and Mr. Lezak declared an impasse and concluded the mediation.

II. ESTABLISHED LAW AND FACTS

2.1 Each of the plaintiff Tribes has a fishing right reserved in treaties with the United States which "secured" the "right of taking fish, at all usual and accustomed grounds and stations, . . . in common with all citizens, . . ."

2.3 The Indians understood that the sharing of the fish with the citizens of the United States would not be a significant limitation on their right to take fish.

2.3 When the Treaties were signed, neither the United States nor the Indians contemplated that there would be any limitations on the number of fish that either the Indians or the non-Indians could harvest.

2.4 The tribes' harvest of fish declined for several decades before 1974 due to illegal State regulation, the unlawful exclusion of Indians from their traditional fishing areas, and discriminatory enforcement of State laws against Indian fishers. By 1974 the tribes were collectively harvesting only about 500,000 anadromous fish per year.

2.5 After the Court's decision in 1974, as the Court's decision was implemented, the tribes' harvest rose dramatically until 1986, when the collective tribal harvest, based upon safe and agreed upon escapement standards, exceeded 5,000,000 anadromous fish.

2.6 Since 1986, the number of anadromous fish available for harvest, and consequently tribal harvests, have decreased so greatly that by 1999 the tribal harvest was collectively about the same as their harvest at the time of the 1974 decision.

2.7 A significant reason for the decline of harvestable fish has been the destruction and modification of habitat needed for their survival.

III. OPERATIVE FACTS: FISH BLOCKING CULVERTS

3.1 Where a roadway crosses a river or stream, either a bridge must be constructed above the watercourse or a tunnel, called a culvert, must be built beneath the roadway. Where a culvert is correctly built and maintained, it does not impede the passage of fish through the culvert. However, where a culvert is improperly constructed or maintained, it may completely block all fish passage through the culvert, thereby preventing out-migration of juvenile fish to rearing areas or the salt water, or the return of adult fish to spawning beds, or both.

3.2 The blocking of fish passage at human made barriers such as road culverts is one of the most recurrent and correctable obstacles to healthy salmonid stocks in Washington.

3.3 One habitat-related cause for weakening of salmonid production which can be easily resolved is human-made barriers to fish migrations caused by improper placement, construction and maintenance of road culverts.

3. 4 The Washington State Department of Transportation (WSDOT) is the State agency

responsible for constructing and maintaining State Highways so that when the highways cross salmonid bearing streams the streams are not obstructed.

3.5 WSDOT, together with the Washington Department of Fisheries and Wildlife (WDFW), has inventoried all of the State Highway stream crossings in Washington State to determine which stream crossings block fish passage.

3.6 WSDOT and WDFW have published this inventory in these reports: (1) Fish Passage Program Progress Performance Report for the Biennium 1991-3; (2) Fish Passage Program Progress Performance Report for the Biennium 1993-5; and (3) Fish Passage Program Department of Transportation Final Report (hereinafter 'Final Report'), dated June, 1997.

3.7 According to the reports listed in Paragraph 3.6 culverts under State Highways owned and maintained by WSDOT block or obstruct adult salmonid access to at least 249 linear stream miles, at least 407,464 square meters of productive salmon spawning habitat, and at least 1,619,839 square meters of productive salmonid rearing habitat in the State of Washington.

3.8 If these blockages to fish passage were removed, WSDOT and WDFW estimate that approximately 200,000 adult salmonids would be produced annually by the areas opened to fish passage. Many of these fish would be available for harvest by the Tribes.

3.9 WSDOT and WDFW estimate that all of the fish blocking culverts identified in the Final

Report will be opened in 20 to 100 years or more, depending on Legislative appropriations.

3.10 Other State agencies or departments, including WDFW and the Washington Department of Natural Resources (DNR), administer state owned lands and have constructed and maintained culverts on those lands which block fish passage.

3.11 WDFW and DNR are each conducting an inventory of the culverts on lands which each department administers.

3.12 Reduction of productive fish habitat as a result of fish blocking culverts owned by the State reduces the number of fish available to plaintiff Tribes.

3.13 Such a reduction in the number of fish available to the plaintiff Tribes impairs the Tribes' ability to achieve a moderate living from their treaty fisheries.

3.14 Today, and since at least 1994, the Tribes are not able to achieve a moderate living from their treaty fisheries.

IV. DEMAND FOR JUDGMENT

WHEREFORE, the Plaintiff-Intervenor Tribes pray for judgment:

Declaratory Judgment:

4.1 The "right of taking fish," secured to the plaintiff tribes in the Stevens Treaties, imposes a duty upon the State Washington to refrain from diminishing, through the construction or maintenance of culverts under State owned roads and highways, the number of fish that would otherwise return

to or pass through the tribes' usual and accustomed fishing grounds and stations, to the extent that such diminishment would impair the tribes' ability to earn a moderate living from the fishery.

4.2 The State has violated, and continues to violate, the duty owed the plaintiff tribes under the Stevens Treaties to refrain from construction and maintenance of culverts that diminish the number of fish · that would otherwise return to or pass through the tribes' usual and accustomed fishing grounds and stations.

Prohibitory Injunction:

4.3 Prohibiting the State of Washington and each of its agencies, departments, officers, and agents from constructing or maintaining any culverts that reduce the number of fish that would otherwise return to or pass through the usual and accustomed grounds and stations of any plaintiff Tribe.

Mandatory Injunction:

Requiring State of Washington and each of its agencies, departments, officers, and agents:

4.4 To identify the location of all culverts constructed or maintained by any State agency or department, including, but not limited to, WSDOT, WDFW, and DNR, that diminish the number of fish that would otherwise return to or pass through the tribes' usual and accustomed fishing grounds and stations, within eighteen months of the date of judgment.

4.5 Within five years of the date of judgment, to fix and thereafter maintain all culverts

built or maintained by any State agency or department, including but not limited to WSDOT, WDFW a DNR, such that they do not diminish the number of fish that would otherwise return to or pass through the usual and accustomed fishing grounds and stations of the plaintiff tribes.

Other Relief:

4.6 To award Plaintiff-Intervenor Tribes their actual costs, of litigation, including reasonable attorneys' fees, together with such other relief as may be just, proper and equitable under the circumstances.

DATED this *12* day of *January*, 2001.

KANJI & KATZEN, PLLC

s/Phillip E. Katzen, per DAR
Phillip E. Katzen, WSBA #7835
Co-Counsel for the Suquamish, Jamestown, Lower Elwha, Pt. Gamble Bands of S'Klallams, Nisqually, Nooksack, Sauk-Suiattle, Skokomish, Squaxin Island, Stillagaumish, and Upper Skagit Tribes

s/Riyaz A. Kanji per DAR
Riyaz A. Kanji, WSBA #21039
Co-Counsel for the Suquamish, Jamestown, Lower Elwha, Pt. Gamble Bands of S'Klallams, Nisqually, Nooksack, Sauk-Suiattle, Skokomish, Squaxin Island, Stillagaumish, and Upper Skagit Tribes

RAAS, JOHNSEN & STUEN, P.S.

s/Daniel A. Raas
Daniel A. Raas, WSBA #4970
Harry L. Johnsen, WSBA #4955
Counsel for the Lummi Indian Nation

s/Richard Reich
Richard Reich, WSBA #8178
Counsel for the Quinault Indian Tribe

MORISSET SCHLOSSER
AYER et al.

s/Mason D. Morisset per DAR
Mason D. Morisset, WSBA #273
Counsel for the Tulalip Tribe

s/Michelle Hansen per DAR
Michelle Hansen, WSBA #14051

and

s/Kevin R. Lyon
Kevin R. Lyon, WSBA #15076
Counsel for the Squaxin Island Tribe

s/Scott Wheat per DAR
Scott Wheat, WSBA #25565
Co-Counsel for the Suquamish Indian Tribe

s/Annette M. Klapstein per DAR
Annette M. Klapstein, WSBA #9312

AND

s/Timothy Weaver per DAR
Timothy Weaver, WSBA #3364
Counsel for the Confederated Tribes and Bands of the Yakama Indian Nation

ZIONTZ, CHESTNUT, et al.

s/John Howard Bell per DAR
John Howard Bell, WSBA #5574
Counsel for the Puyallup Indian Tribe

s/John Arum per DAR
John Arum, WSBA #19813
Counsel for the Makah Indian Nation

s/Nettie Alvarez per DAR
Nettie Alvarez, WSBA #12283

AND

s/Alix Foster per DAR
Alix Foster, WSBA #4943
Counsel for the Swinomish Indian Tribal Community

s/Richard S. Ralston per DAR
Richard S. Ralston, WSBA #8546
Counsel for the Hoh Tribe

s/Richard A. Guest per DAR
Richard A. Guest, WSBA #26205
Co-Counsel for the Skokomish Indian Tribe

EISENHOWER, CARLSON, et al.

s/Tracey A. Thomson per DAR
Tracey A. Thomson, WSBA #24546
Co-Counsel for the Jamestown, Lower Elwa, and Pt. Gamble Bands of S'Klallams, and the Skokomish Indian Tribes

s/David Vogel per DAR
David S. Vogel WSBA #13672
Counsel for the Quileute Indian Tribe

s/Bill Tobin per DAR
Bill Tobin, WSBA #4397
Co-Counsel for the Nisqually Indian Tribe

EXHIBIT A

[PHILLIP E. KATZEN, PLLC letterhead]

June 16, 2000

The Honorable Christine Gregoire, Attorney General
Robert K. Costello, Senior Assistant Attorney General
P.O. Box 40100
Olympia, WA 98504-0100

Re: REQUEST TO MEET AND CONFER PURSUANT TO PARAGRAPH 25:
The State's Duty To Repair and Maintain State Owned Culverts To Prevent Blockage Of Anadromous Fish Passage

Dear General Gregoire and Mr. Costello:

The undersigned tribes request that you attend a conference to meet and confer regarding potential litigation in *United States v. Washington* on July 10, 2000, at 10:00 AM, in the conference room of Morisset, Schlosser, Ayer & Jozwiak.

This request is made pursuant to subparagraphs 25(a)(4) and (a)(7) of the Order Modifying Paragraph 25 of Permanent Injunction, entered in *United States v. Washington*, on August 23, 1993.

FACTUAL BACKGROUND

During the 1991-93, 1993-95, and 1995-97 biennia, the Washington Department of Fish and Wildlife (WDFW) and the Washington Department of Transportation (WSDOT) cooperated on an assessment of culverts that underlie State highways. Three reports were issued: Fish Passage Program

Progress Performance Report for the Biennium 1991-93; Fish Passage Program Progress performance Report for the Biennium 1993-95; and Fish Passage Program Department of Transportation Final Report (hereinafter 'Final Report'), dated June, 1997. These reports document the culvert study, the development of a methodology for assessing fish passage through culverts, the formulation of a Priority Index based on species of salmonid blocked by a culvert and based on the spawning and rearing habitat interdicted by the culvert, and a list of 177 WSDOT culverts which had been ranked as of the date of the Final Report. The Final Report notes that an additional 186 culverts had not yet been ranked.

The Final Report states that opening the ranked culverts would provide approximately 200,000 more adult salmonids per year to the State of Washington. We believe that number substantially understates the number of adult salmonids that could return were the culverts opened to fish passage. First, as acknowledged in the Final Report, the total would be higher if the additional 186 culverts were included in the assessment. Second, the Final Report deals only with culverts that block adult salmonids from returning to spawn; it does not address juvenile salmonids that are either unable to outmigrate, or are killed, as a result of culverts. Third, the Final Report does not estimate the total number of adult salmonids that could be expected to return if all the WSDOT culverts were opened to fish passage.

If the State Legislature continued to specially fund barrier culvert correction at the same levels that occurred in the 1993-95 and 1995-97 biennia, the Final Report estimates that the time for correction

would exceed 100 years. If WSDOT opened blocking culverts in conjunction with its other highway repair and maintenance projects, the Final Report estimates it would take two to three decades to complete the repair of the barrier culverts.

Most of these fish blocking culverts reduce the productive habitat available for salmonids that return to or pass through *United States v. Washington* case area tribal usual and accustomed fishing grounds and stations. This reduction of productive salmonid habitat caused by blocking culverts is in part responsible for the reduction of the numbers of harvestable fish available to the tribes, which in turn is in part responsible for the failure of the tribes to achieve a moderate living through their treaty reserved fishery.

RELIEF THAT WILL BE REQUESTED

If this matter proceeds to litigation, the tribes will seek at least the following relief:

(1) A declaratory judgment that:

(a) The treaties between the tribes and the United States impose on the State of Washington and its agencies the duty to refrain from constructing and maintaining culverts beneath State highways that block passage of fish that would otherwise return to or pass through tribal usual and accustomed grounds and stations, where such blockage impairs the tribes' ability to achieve a moderate livelihood from the fishery, and

(b) The State's construction and maintenance of culverts beneath State highways that block fish

passage to spawning and rearing habitat violates this duty.

(2) An injunction that:

(a) Prohibits the State of Washington, and its State agencies, from constructing or maintaining any culverts beneath State highways that block passage of fish that would otherwise return to or pass through tribal usual and accustomed grounds and stations, and

(b) Requires the State of Washington, and its State agencies, to establish 100% fish passage through all culverts beneath State highways that block passage of fish that would otherwise return to or pass through tribal usual and accustomed grounds and stations within a period of time to be established by the Court, and to thereafter maintain those culverts to ensure that 100% fish passage is preserved.

PARAGRAPH 25(b)(l) REQUIREMENTS

A. The basis for the relief stated above is the State's duty, pursuant to the Stevens' Treaties, to refrain from impairing the tribes' ability to achieve a moderate living from their fisheries, including the duty to refrain from actions that block access to spawning and rearing habitat such that the number of fish that would return to or pass through tribal usual and accustomed fishing areas is reduced. The State has violated that duty because the continuing harm to the fishery habitat caused by these culverts has contributed to the reduction in the tribes' harvest below the number of fish needed for the tribes to attain a moderate living from their fisheries.

B. Settlement is possible if the State acknowledges in an enforceable court order:

(1) that it has a duty pursuant to the Stevens treaties to refrain from degrading the fish habitat by blocking access to salmon spawning and rearing habitat through the construction and maintenance of fish blocking culverts as alleged herein to the extent that the tribes' ability to achieve a moderate living from the fishery is impaired;

(2) that it violated this duty;

(3) that it will refrain in the future from violating or avoiding this duty; and

(4) that mitigation measures for the damage caused by its actions will be completed in a timely manner. A timely manner for the purposes of the State highway fish blocking culverts is substantially less than the 20 to 30 year period estimated in the Final Report.

C. This matter is not appropriate for the Fisheries Advisory Board.

D. Technical issues concerning culvert construction and repair, if any, may be capable of resolution by agreement.

E. No independent regulatory action can resolve this controversy because acknowledgement and implementation of the treaty right are at the heart of this dispute.

F. Earlier opinions in this case by the District Court and the Ninth Circuit addressed the existence of the State's duty under the Stevens' Treaties to refrain from actions that adversely affect fish

habitat. Those opinions did not resolve the issue; the Ninth Circuit held that resolution of the issue would depend upon concrete facts which underlie a dispute in a particular case. The case presented here provides a specific fact based situation which satisfies the Ninth Circuit's requirements for resolution of this issue.

Earlier rulings in this case by the District Court, the Ninth Circuit, and the Supreme Court, however, have established that the tribes' rights to take fish are "secured" by the treaties, that those rights are permanent, and that the State may not permit the subject matter of the treaties to be destroyed. Earlier rulings in other cases have also established that a reservation of rights in a treaty includes by implication whatever is necessary to make the reservation of those rights effective.

G. The parties may be able to resolve this dispute by mediation. It is not capable of arbitration.

If the date and time identified above are not convenient, please contact us so that we may reschedule to a mutually acceptable date and time. We look forward to meeting with you and the State's policy representatives to discuss the resolution of the issues described above.

Very truly yours,

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RECEIVED
Jan 19 2001
OFFICE OF ATTORNEY GENERAL
FISH & WILDLIFE DIVISION

HONORABLE
BARBARA JACOBS ROTHSTEIN

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT
OF WASHINGTON

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHIGNTON, et al., Defendants.	Civil No. C70-9213 – Phase I Sub-proceeding No. 01-01 (Culverts) UNITED STATES' RESPONSE TO REQUEST FOR DETERMINATION

The United States of America hereby responds to the Request for Determination filed in this matter as follows:

INTRODUCTION AND DESCRIPTION OF THE SUB-PROCEEDING

This section contains a description of this sub-proceeding, to which no response is required. As described more fully *infra*, the United States supports generally the Tribes' request.

I. PRELIMINIARY MATTERS

1.1 Admitted

1.2 Admitted. Representatives of the United States also attended the meeting.

1. 3. Admitted.

1.4. No representative of the United States was invited to the "government to government" meeting and thus the United States can neither admit nor deny the statements contained in this paragraph, other than to admit, upon information and belief, that such a meeting occurred.

1.5. Admitted. The United States attended and participated in the mediation.

II. ESTABLISBED LAW AND ACTS

2.1. Admitted.

2.2. Admitted.

2.3. Admitted.

2.4. Admitted.

2.5. Admitted.

2.6. Admitted.

2.7. Admitted.

III. OPERATIVE FACTS: FISH BLOCKING CULVERTS

3.1. Admitted.

3.2. Admitted.

3.3. Admitted.

3.4. The United States is without information with which to verify the truth of this statement, but upon information and belief it is admitted.

3.5. Admitted.

3.6. Admitted.

3.7. This paragraph summarizes the conclusions of voluminous reports, which reports speak for themselves.

3.8. This paragraph summarizes the conclusions of voluminous reports, which reports speak for themselves.

3.9. This paragraph summarizes the conclusions of voluminous reports, which reports speak for themselves.

3.10. The United States is without information with which to verify the truth of these statements, but upon information and belief they are admitted.

3.11. The United States is without information with which to verify the truth of these statements, but upon information and belief they are admitted.

3.12. Admitted.

3.13. Admitted.

3.14. Admitted as to the year 1994 and before. *United States v. Washington*, 873 F.Supp. 1422, 1445-1446 (W.D. Wash. 1994) *aff'd.* 14157 F.2d 630 (1998) *cert. denied* 526 U.S. 1060 (1990). The United States is without information with which to verify the truth of this statement as to years after 1994, but it knows of no change in circumstances which would alter the conclusions reached by this Court in 1994.

IV. DEMAND FOR JUDGMENT

The United States requests that this Court enter an order declaring the rights of the parties and enjoining their actions as follows:

Declaratory Judgment.

The United States requests that the Court declare that:

4.1. The right of taking fish secured to the plaintiff tribes in the Stevens Treaties imposes a duty upon the State of Washington to refrain from degrading the fishery resource through the construction or maintenance of culverts under State owned roads and highways in a way that deprives the Tribes of a moderate living from the fishery.

4.2. The State has violated and continues to violate the duty owed to the plaintiff tribes under the Stevens Treaties through the operation and maintenance of culverts which reduce the number of fish that would otherwise return to or pass through the Tribes' usual and accustomed fishing grounds and stations to such a degree as would deprive the Tribes of the ability to earn a moderate living from the fishery.

4.3. The Ninth Circuit held that the legal standards that govern the State's precise obligations and duties under the Treaties with respect to State actions that may affect the environment of the treaty area will depend upon concrete facts which underlie a particular case. In the context of State culverts that appreciably degrade fish passage and interfere with the Tribes' ability to realize a moderate living from the fishery, the State's obligations include the duty to correct in a timely way the fish passage problems associated with the culverts.

Prohibitory Injunction:

The United States seeks an Order that:

4.4. Prohibits the State of Washington, and each of its agencies, departments, officers, employees, contractors and agents from constructing, operating, or maintaining any culvert in a manner that would deprive the Tribes of the ability to earn a moderate living from the fishery. Those culverts that are designed, built, and maintained consistent with the current best available design and engineering standards relating to the passage of fish under highways would not be subject to the injunction as they would not appreciably degrade the fishery, thereby, limiting the ability of the plaintiff-Tribes to earn a moderate living from the fishery.

Mandatory Injunction:

The United States seeks an Order that:

4.5. Requires the State of Washington and each of its agencies, departments, officers, employees, contractors and agents to identify, within eighteen months of the date of judgment (or such other time period as the Court shall deem necessary and just) the location of all culverts owned, constructed or maintained by any State agency or department, including the Washington State Department of Transportation, the Washington Department of Fish and Wildlife, and the Washington Department of Natural Resources, that degrade appreciably passage of fish that otherwise would pass through usual and accustomed fishing grounds and stations so as to deprive the Tribes of the ability to earn a moderate living from the fishery.

4.6. Requires that, within five years of the date of judgment (or such other time period as the Court deems necessary and just) the State of Washington

and each of its agencies, departments, officers, employees, contractors and agents shall repair, retrofit, maintain, or replace the culverts identified under Paragraph 4.5, in conformity with the best available design and engineering standards for passage of fish beneath highways, as necessary, to avoid depriving the Tribes of the ability to earn a moderate living from the fishery.

Other Relief:

4.7. The United States further requests the Court to award to the United States such other relief as the Court shall deem just, proper, and equitable, including costs of litigation.

RESPECTFULLY SUBMITTED this 16th day of January, 2001.

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AT SEATTLE
CLERK U.S. DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
BY DEPUTY

THE HONORABLE
BARBARA JACOBS ROTHSTEIN

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHIGNTON, et al., Defendants.	CIVIL NO. C70-9213-Phase II [Sub-Proceeding No. 01-01 (Culverts)] STATE OF WASHINGTON'S ANSWER AND CROSS AND COUNTER REQUESTS FOR DETERMINATION

ANSWER

The State of Washington (hereinafter "State") submits the following Answer to the "Request for Determination" (hereinafter "RFD"):

INTRODUCTION AND DESCRIPTION OF THE "SUB-PROCEEDING"

This section contains the Tribes' description of this "sub-proceeding" to which no response is required.

I. STATE RESPONSE TO TRIBES' "PRELIMINARY MATTERS"

1.1 By way of answer to ¶1.1 of the RFD, the State admits that venue is proper in this Court. As explained elsewhere in this Answer, the State denies that a case or controversy exists. The State specifically reserves the right to raise an Eleventh Amendment defense if future circumstances justify the defense. The State denies that the August 23, 1993 Order Modifying Paragraph 25 of the Permanent Injunction, without more, provides this Court with jurisdiction and venue. The State avers that this matter is governed by the Court's June 22, 1993 Order Dismissing Without Prejudice Phase II and Certain Subproceedings in Phase I.

1.2 The State admits the allegations in ¶1.2.

1.3 The State admits the allegations in ¶1.3.

1.4 The State admits the allegations in the first two sentences of ¶1.4. The State admits the third sentence with the following explanation: At all times the State has been willing to discuss a settlement related to the prioritization process or remedial timetable for fixing State-owned culverts. The Tribes demanded, however, that the State admit the existence of some treaty-based right to environmental protection of indeterminate scope. All involved, including the Governor and the tribal officials, recognized that the parties had reached an impasse. The State admits the final sentence in ¶1.4.

1.5 The State admits the allegations in ¶1.5.

II. STATE RESPONSE TO TRIBES' "ESTABLISHED LAW AND FACTS"

2.1 The State admits the allegations in ¶2.1.

2.2 The State admits only that the allegations in ¶2.2 resemble sentences in a paragraph from the decision in *Washington v. Washington State Commercial Passenger Fishing Vessel Association,* 443 U.S. 658, 668 (1979) (hereinafter *Passenger Fishing Vessel*). The State lacks knowledge sufficient to form a belief as to the truth of the remaining averments in ¶2.2 and therefore denies all allegations not specifically admitted.

2.3 The State admits only that the allegations in ¶2.3 resemble sentences in a paragraph from the decision in *Passenger Fishing Vessel,* 443 U.S. at 668. The State lacks knowledge sufficient to form a belief as to the truth of the remaining averments in ¶2.3 and therefore denies all allegations not specifically admitted.

2.4 The State admits only that Judge Boldt made a similar finding that the Supreme Court acknowledged in *Passenger Fishing Vessel,* 443 U.S. at 669 and n.14, and denies the remaining allegations in ¶2.4.

2.5 The State admits the allegation in ¶2.5. The State avers that many of the fish harvested by the Tribes in 1986 included hatchery-spawning fish and Fraser River salmon, whose life history is affected minimally or not at all by State-owned culverts.

2.6 The State admits the allegation in ¶2.6. The State avers that annual harvests fluctuate for many reasons and that conditions unrelated to State-

owned culverts contributed to the poor 1999 harvest. Such reasons include low numbers of Fraser River salmon, a decline in the chum population, and extremely poor hatchery survival rates.

2.7 By way of answer to ¶2.7, the State denies that State-owned culverts have cause significant decline in the number of fish harvested by the plaintiff Tribes since 1986. The number of State-highway culverts did not significantly increase between 1974 and 1986. Since 1986, the number of State-highway culverts that constitute fish passage barriers has declined due to the State's fish passage barrier remediation programs pursuant to state law.

III. STATE RESPONSE TO TRIBES' "OPERATIVE FACTS: FISH BLOCKING CULVERTS"

3.1 By way of answer to the allegations in ¶3.1, the State admits that roadway stream crossings must provide for some means to convey water through or under the roadway and that bridges and culverts are typically used for this purpose. The State avers that culverts that are properly designed, constructed and maintained generally will not impede fish passage. Some culverts designed and constructed according to appropriate standards have become fish passage barriers over time due to erosion, catastrophic events such as earthquakes, and other natural processes. In addition, scientific research (much of which has been funded by the Washington State Department of Transportation (WSDOT) and the Washington Department of Fish and Wildlife (WDFW)) has led to a better understanding of fish behavior and their ability to navigate culverts. Design

and construction standards that were at one time believed to provide adequate fish passage are now recognized as inadequate in some cases. The State denies all remaining allegations not specifically admitted.

3.2 By way of answer to ¶3.2, the State admits that some culverts are a current and generally correctable cause of fish habitat unavailability. The State denies all remaining allegations not specifically admitted.

3.3 By way of answer to ¶3.3, the State admits that road-related fish passage barriers have reduced the available fish habitat. The State avers that correcting the State-owned fish passage barrier culverts that have been identified to-date is estimated to cost hundreds of millions of dollars. In addition to the high cost (and competing demands for limited State funding), factors such as the limited availability of qualified design and construction personnel, limited time periods for conducting in-stream work, and the lengthy permitting time mean that barrier correction will take substantially longer than five years. The State therefore denies that the fish passage barrier culvert problem "can be easily resolved."

3.4 The State admits the allegation in ¶3.4.

3.5 The State admits that WSDOT and the Washington Department of Fisheries commenced an inventory of state highway stream crossings in Washington State to determine which stream crossings blocked passage to anadromous fish classified as "food fish" under state law. The State further avers that WSDOT and WDFW are now conducting a second inventory of stream crossings on

the state highway system to determine which stream crossings block fish passage. The second inventory considers resident fish and steelhead as well as anadromous fish classified as "food fish." WSDOT and WDFW estimate that the new inventory will be completed in approximately five years. It is unlikely that the new inventory could be completed in less time. The State denies all remaining allegations not specifically admitted.

3.6 By way of answer to ¶3.6, the State admits that it published the reports identified in that paragraph as well as subsequent reports documenting the progress of the State's fish passage barrier remediation program being conducted under State law.

3.7 By way of answer to ¶3.7, the State admits that one of the historical reports identified in ¶3.6 contains the figures stated in this paragraph. The State avers that since 1991, the WSDOT/WDFW fish passage barrier removal program conducted under State law has opened over 147 linear miles of stream habitat and restored over 908,000 square meters of salmonid habitat. The State denies all remaining allegations not specifically admitted.

3.8 By way of answer to ¶3.8, the State admits that one of the historical reports identified in ¶3.6 contains the theoretical estimate that the Tribes set forth in this paragraph. The State avers that the estimate assumes that salmon populations are limited only by the amount of available habitat. Whether the barrier removal projects will actually achieve this potential increase in fish production is dependent on many biological and environmental variables

unrelated to the culverts. The State admits that the Tribes would have a right to take a share of the harvestable fish that pass through tribal usual and accustomed grounds and stations. The State denies all remaining allegations not specifically admitted.

3.9 By way of answer to ¶3.9, the State admits that one of the historical reports identified in ¶3.6 states that if only dedicated funding at the then-current level were used to repair barrier culverts, complete resolution would require about 100 years. The State avers that the same report also states that WSDOT's program of fixing barrier culverts encountered during the course of transportation projects would lead to complete resolution in two to three decades. Under the funding levels WSDOT has requested of the Legislature, WSDOT estimates that the identified fish passage barriers will be corrected in 20 years or less. WSDOT has already corrected approximately 70 of the barriers expected to yield the most significant increases in available fish habitat.

The remaining WSDOT fish passage barriers have been or are being prioritized for correction to ensure that available funds are spent on projects that provide the greatest potential for increased fish habitat and fish production. The State denies all remaining allegations not specifically admitted.

3.10 By way of answer to ¶3.10, the State admits that other State agencies or departments, including the Washington Department of Fish and Wildlife and the Washington Department of Natural Resources, operate and maintain roads on State-owned lands that contain some culverts that are fish passage barriers. The State denies all remaining allegations not specifically admitted.

3.11 The State admits the allegation in ¶3.11.

3.12 By way of answer to ¶3.12, the State avers that State-owned culverts have been a factor in making some potential fish habitat inaccessible. The relationship between accessible fish habitat and harvestable fish depends on many other factors unrelated to culverts, however. These factors include but are not limited to ocean and estuary conditions, hatchery survival rates, harvest levels, dams, and predator behavior. The interplay of these factors and fish behavior determines whether the opening of new habitat will result in larger numbers of harvestable fish or will simply redistribute the existing population levels. The State denies that State-owned culverts have been a significant cause of decline in the tribal fish harvest since 1986. Since 1986, the number of State-highway culverts that constitute fish passage barriers has declined due to the State's fish passage barrier remediation programs. The State denies all remaining allegations not specifically admitted.

3.13 The State lacks knowledge sufficient to form a belief as to the truth of the averments in ¶3.13 and therefore denies those averments.

3.14. The State lacks knowledge sufficient to form a belief as to the truth of the averments in ¶3.14 and therefore denies those averments.

3.15. The State denies all allegations in the RFD not specifically admitted and all allegations of unlawful behavior contained in the RFD.

IV. STATE RESPONSE TO TRIBES' AND UNITED STATES' "DEMANDS FOR JUDGMENT"

To the extent a response to the demands for judgment in the Tribes' RFD and the United States' Response to Request For Determination is deemed necessary, the State provides the following:

For the factual and legal reasons stated elsewhere in this Answer and Cross- and Counter-Request For Determination, the Tribes are not entitled to the relief requested in Part IV of their RFD, and the United States is not entitled to the relief requested in part IV of its Response.

V. ADDITIONAL FACTS AND LAW SUPPORTING STATE'S DEFENSES AN CROSS- AND COUNTER-REQUESTS FOR DETERMINATION

By way of further answer, and in support of the State's defenses, cross-request for determination, and counter-request for determination, the State avers as follows:

5.1 The United States is a party to treaties with the plaintiff Tribes. Only Congress can modify or abrogate the terms of Indian treaties, and when it does so it must make its intent clear and plain. Federal executive agencies have a duty to ensure that the Tribes' treaty rights are not abrogated or impinged upon when those agencies fund, authorize, approve, or otherwise participate in actions of the State of Washington and its agencies.

5.2 In 1996, the Washington Department of Natural Resources (DNR) applied to the federal

government for an incidental take permit under Section 10 of the Endangered Species Act (ESA) for activities relating to DNR's management of approximately 1.6 million acres of State-owned trust lands, including lands within the *United States v. Washington* "case area." As part of its application, the DNR prepared a "habitat conservation plan" (HCP). The HCP includes provisions for road system management. Those provisions require DNR to identify fish blockages caused by stream crossings and prioritize their retrofitting or removal on lands west of the Cascade crest.

5.3 At no time during the permit application process did the federal government inform DNR that any treaties would be violated if DNR implemented the culvert remediation strategy proposed in the HCP.

5.4 In 1997, the United States Fish and Wildlife Service (USFWS), an agency within the United States Department of the Interior, granted DNR's application for an incidental take permit and approved the HCP. The USFWS published a notice of its approval in the February 27, 1997 issue of the Federal Register. In that notice, the USFWS recognized that the HCP addressed "anadromous salmonids which are a resource subject to the Fish and Wildlife Service's trust responsibility," and announced it was issuing the permit because the HCP met the USFWS's "trust responsibility to Native American Tribes."

5.5 On January 30, 1997, the DNR entered into a 70-year "Implementation Agreement" with the United States Secretaries of Commerce and the Interior concerning the HCP. In the Implementation

Agreement, the Secretaries promised not to require DNR to take additional measures or allocate additional funds beyond the commitments in the HCP absent unforeseen or extraordinary circumstances. At no time has the Secretary of Commerce or the Secretary of the Interior claimed that unforeseen or extraordinary circumstances are present. At no time has the Secretary of Commerce or the Secretary of the Interior taken the position that DNR is violating the HCP or the Implementation Agreement.

5.6 In implementing its road culvert remediation program on State-owned trust lands, the State reasonably relied on the federal government's approval of the DNR HCP, including its representations that the HCP satisfied any "trust responsibility to Native American Tribes."

5.7 In June 1997, the United States Secretaries of Commerce and the Interior issued a "Secretarial Order" on "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" ("Secretarial Order"). The Secretarial Order pledges that the Departments of Commerce and the Interior "will carry out their responsibilities under the [Endangered Species] Act in a manner that harmonizes the Federal trust responsibility to tribes, tribal sovereignty, and statutory missions of the Department." The Secretarial Order sets forth a policy that, when the National Marine Fisheries Service (NMFS), an agency within the United States Department of Commerce, exercises regulatory authority under Section 4(d) of the ESA, it shall avoid or minimize effects on the exercise of reserved Indian fishing rights to the maximum extent allowed by law.

5.8 During the 1990s, DNR worked with other Washington State agencies, the plaintiff Tribes, and others to develop proposals to improve and protect fish habitat on non-federal forestlands in Washington. They released the proposals in 1999 in the "Forests and Fish Report." The "Forests and Fish Report" proposes that fish-blocking culverts on forest roads be repaired by 2015.

5.9 In 2000, the NMFS adopted a rule under Section 4(d) of the Endangered Species Act prohibiting the take of salmon listed as "threatened" under that Act. NMFS stated that maintaining fish passage barriers can be a "take." But NMFS said it may exempt from the "take" prohibition activities conducted in accordance with the Forests and Fish Report, including the 15-year period for remediation of fish passage problems on state forest roads. The NMFS knew or should have known of any United States treaty obligations. The NMFS had a duty to ensure that the Tribes' treaty rights were not abrogated or impinged upon when it adopted its 4(d) rule, and, according to the Secretarial Order, NMFS was supposed to avoid affecting the exercise of Indian treaty fishing rights to the maximum extent allowed by law. The State reasonably concluded that by approving or failing to object to the State's 15-year remediation schedule for forest roads, the NMFS had determined that the schedule satisfied any treaty obligation.

5.10 The United States Congress has appropriated funds to carry out the proposals in the Forests and Fish Report. The Congress did not make clear and plain any intent to abrogate or modify treaty rights when it made that appropriation. The State

reasonably concluded that the Congress had determined that the Forests and Fish Report, including its 15-year schedule for remediation of fish passage problems on forest roads, was consistent with any treaty obligation.

5.11 Some of the plaintiff Tribes agreed with the Forests and Fish Report. The State reasonably believed that these plaintiff Tribes had concluded that the Forests and Fish Report, including its 15-year schedule for remediation of fish passage problems on forest roads, satisfied any treaty obligation that the State may owe to the Tribes. If those actions do not satisfy some treaty-based duty, the State has relied to its detriment on the actions of these plaintiff Tribes.

5.12 The United States Environmental Protection Agency (EPA) has delegated to the Washington Department of Ecology the authority to set water quality standards under Section 303 of the federal Clean Water Act. The EPA retains authority to determine whether the State's water quality standards are consistent with the Clean Water Act. In exercising such authority, the EPA has a duty to ensure that the Tribes' treaty rights are not abrogated or impinged upon.

5.13 As part of Washington State's implementation of the Forests and Fish Report, the Washington Department of Ecology has adopted interim forest practices rules for water quality, including rules for forest roads. These interim rules incorporate the 15-year road remediation schedule of the Forests and Fish Report. At no time has the EPA informed the State that the interim rules are inconsistent with the Clean Water Act or the Tribes'

treaty rights. The State reasonably concluded that by approving or failing to object to the State's 15-year remediation schedule for forest roads, the EPA had determined that the schedule satisfied any treaty obligation.

5.14 Many of the fish passage barrier culverts in the WSDOT inventory are in highways funded in part by the United States under the Federal Aid Road Act of 1916 and successor legislation. These highways were designed according to standards set or approved by the Federal Highway Administration (FHWA) and its predecessors. The FWHA *[sic]* retained authority for final design approval. The FHWA knew or should have known of any United States treaty obligations. The FHWA has a duty to ensure that the Tribes' treaty rights are not abrogated or impinged upon when it sets design standards, approves designs, and monitors maintenance on federal-aid highways. The State reasonably concluded that by approving or failing to object to the State's culvert design and maintenance, the FHWA had determined that the design and maintenance satisfied any treaty obligation. WSDOT used the same culvert design and maintenance standards on its other roads that were not funded under federal highway-aid legislation.

5.15 When Washington state agencies install culverts, they must comply with the federal Clean Water Act. Since 1977, the United States Army Corps of Engineers has issued nationwide permits under Section 404 of the Clean Water Act for certain activities, including the installation of culverts. The State of Washington has installed culverts in reliance on such permits. The Corps of Engineers has a duty to ensure that the Tribes' treaty rights are not abrogated

or impinged upon when it administers the Clean Water Act. Since 1986, the Corps of Engineers has required as a General Condition of its nationwide permits that activities performed under the permits not impair tribal reserved rights, including, but not limited to, treaty fishing rights. The Corps of Engineers has never informed the State of Washington that any of its culvert installation activities impair treaty fishing rights or violate any nationwide permit. The State reasonably concluded that by approving or failing to object to the State's culvert design, the Corps of Engineers had determined that the design satisfied any treaty obligation.

5.16 When Washington state agencies install some culverts in waters of the United States, they must secure individuals permit from the United States Army Corps of Engineers for the installation. The Corps of Engineers knew or should have known of any United States treaty obligations. The Corps of Engineers has a duty to ensure that the Tribes' treaty rights are not abrogated or impinged upon when it issues permits. The Corps of Engineers has never denied a culvert installation permit on the basis that it abrogated or impinged upon Indian treaty rights. The State reasonably concluded that by approving or failing to object to the State's culvert design, the Corps of Engineers had determined that the design satisfied any treaty obligation.

5.17 Section 7 of the federal Endangered Species Act requires federal agencies to consult with the United States Secretary of the Interior or Commerce to insure that actions they authorize or fund do not jeopardize the continued existence of any

endangered or threatened species or result in the destruction or adverse modification of critical habitat. In June 1997, the United States Secretaries of Commerce and the Interior issued the Secretarial Order described in ¶5.7 of this Response. The Secretarial Order pledges that the Departments of Commerce and the Interior "will carry out their responsibilities under the [Endangered Species] Act in a manner that harmonizes the Federal trust responsibility to tribes, tribal sovereignty, and statutory missions of the Department." The Secretarial Order sets forth an agency policy that, when federal agencies consult with NMFS or USFWS under Section 7 of the ESA on a proposed action that may affect tribal rights, NMFS or USFWS shall notify affected Tribes, give full consideration to tribal comments, and strive to ensure that any reasonable and prudent alternatives to the proposed action not discriminate against Tribes.

5.18 The United States Army Corps of Engineers authorizes, and the FHWA funds, some WSDOT highway construction work. NMFS and the USFWS have collectively reviewed hundreds of WSDOT road projects as required by § 7 of the ESA, including many since the Secretarial Order was issued in June 1997. NMFS and the USFWS have a duty to ensure that the Tribes' treaty rights are not abrogated or impinged upon when they consult under § 7 of the ESA. Since June 1997, NMFS and the USFWS have been guided by the Secretarial Order, which requires them to coordinate with Tribes and avoid discriminatory impacts on Tribes when they consult on actions that may affect tribal rights. These federal agencies have routinely approved WSDOT

culvert designs and have never expressed any concern that WSDOT culverts may adversely affect tribal rights. The State reasonably concluded that by approving or failing to object to the State's culvert design, these federal agencies had determined that the design satisfied any treaty obligation.

5.19 In June 1997, the United States Secretaries of Commerce and the Interior issued the Secretarial Order described in paragraphs 5.7 and 5.17 of this Response. The Secretarial Order pledges that the Departments of Commerce and the Interior "will carry out their responsibilities under the [Endangered Species] Act in a manner that harmonizes the Federal trust responsibility to tribes, tribal sovereignty, and statutory missions of the Department." The Secretarial Order sets forth a policy that, when NMFS exercises regulatory authority under Section 4(d) of the ESA, it shall avoid or minimize effects on the exercise of reserved Indian fishing rights to the maximum extent allowed by law.

5.20 The NMFS has adopted a rule under § 4(d) of the ESA that prohibits the taking of threatened salmon, subject to certain exceptions that NMFS deems to contain adequate safeguards. One such exception applies to employees or agents of a state conducting routine road maintenance activities under a program substantially similar to that of the Oregon Department of Transportation. In June 2000, WSDOT requested that NMFS include WSDOT's routine road maintenance activities performed according to the WSDOT "Maintenance Manual for Water Quality and Habitat Protection" in the 4(d) rule. WSDOT's current maintenance activities conform to the protocols in this manual and meet or

exceed the standards in the Oregon DOT manual. The WSDOT manual contains protocols for inspecting culverts and maintaining fish passage through the culverts. The NMFS had a duty to ensure that the Tribes' treaty rights were not abrogated or impinged upon when it adopted its 4(d) rule, and according to the Secretarial Order NMFS was supposed to avoid affecting the exercise of Indian treaty fishing rights to the maximum extent allowed by law. The State reasonably concluded that by approving or failing to object to the ODOT routine maintenance program, or Washington's "Maintenance Manual for Water Quality and Habitat Protection," the NMFS had determined that these maintenance activities satisfied any treaty obligation.

5.21 Washington State law has long required that anyone constructing a hydraulic project in a stream must obtain a Hydraulic Project Approval from the WDFW or its predecessors to ensure the proper protection of fish life. WDFW has developed extensive design criteria for all hydraulic conveyances, which are the state-of-the-art. All new culverts installed on state roads and highways must conform to these criteria. In its Federal Register document adopting a rule prohibiting the take of threatened salmon under Section 4(d) of the ESA, the NMFS praised the WDFW criteria as an excellent framework for making decisions on culverts and road crossings and as ensuring adequate fish passage. NMFS has adopted these criteria in its own documents. The NMFS has a duty to ensure that the Tribes' treaty rights are not abrogated or impinged upon. According to the Secretarial Order, when NMFS adopted its 4(d) rule it was supposed to avoid affecting

the exercise of Indian treaty fishing rights to the maximum extent allowed by law. The State reasonably concluded that by approving or failing to object to the State's culvert design, the NMFS had determined that the design satisfied any treaty obligation.

5.22 As described in paragraphs 5.2 through 5.10 and 5.12 through 5.21 above, the United States has funded, authorized, approved, or otherwise participated in the design, construction and maintenance of many of the State's culverts. The United States has funded, authorized, approved, or otherwise participated in the State's proposals to correct fish passage problems on state-owned roadways. The State of Washington reasonably concluded that the United States had determined that the state actions described in paragraphs 5.2 through 5.21 satisfied any treaty obligation. If those actions do not satisfy some treaty-based duty, the State has reasonably relied to its detriment on the actions of the United States. The United States has a duty to pay all costs incurred by the State to identify and fix any and all barrier culverts. As described below, the United States also has a duty to take action on its own lands so as not to place on the State of Washington an unfair burden of complying with any such treaty-based duty.

5.23 Any treaty-based duty owed by the State to the Tribes must also be owed by the United States to the Tribes.

5.24 The United States, as a land owner, owes a duty to the State not to use its land in such a way as to injure the State. This includes a duty that the United States assume its fair share of the burden of

complying with any treaty-based duty to protect fish habitat.

5.25 Federal agencies own about 7000 miles of public road within the State of Washington. These agencies include the United States Forest Service, the Bureau of Indian Affairs, the National Park Service, the United States military departments and others. In addition to these public roads, federal agencies such as the United States Forest Service manage federal lands within the case area that contain tens of thousands of miles of other roads that are poorly designed and maintained. With respect to the design, construction, and maintenance of culverts and other road-related hydraulic conveyances, the State's standards and practices meet or exceed those of the federal agencies. Roads on federal lands within the *United States v. Washington* "case area" include a very large number of fish passage barriers.

5.26 Upon information and belief, the federal government has not completed an inventory of its own fish passage barriers in the case area. If the federal government had an accurate inventory of its own road-related fish passage barriers, it is likely that the amount of potential salmon habitat made inaccessible by federal barriers would equal or exceed any amount of potential habitat made inaccessible by State-owned culverts.

5.27 In addition to the federal culvert problem, the United States and its agencies have caused widespread destruction of fish habitat within the State of Washington. Destruction of fish habitat by the United States has reduced the number of fish passing through the Tribes' usual and accustomed

fishing grounds and stations and has reduced the tribal harvest. The loss of harvestable fish attributable to these federal actions exceeds any loss reasonably attributable to State-owned culverts.

5.28 Any treaty-based duty to protect fish habitat owed by the State to the Tribes must also be owed by the Tribes to the State.

5.29 Upon information and belief, some or all of the plaintiff Tribes own or maintain roads and have not inventoried or corrected their own road-related fish passage barriers.

5.30 Washington State and territorial law has long required that obstructions across or in streams be provided with a durable and efficient fishway. Washington law has required that such fishways be maintained in an effective condition and continuously supplied with sufficient water to freely pass fish.

5.31 A principal purpose of the treaties was to extinguish Indian claims to the land in Washington Territory. The United States negotiators anticipated industrial and urban development in the relevant geographical area. At least some of the Tribes understood that the United States or the settlers would build public roads, and that the Indians would be able to use them. Governor Stevens and the treaty commissioners were not authorized to grant to the Indians or treat away on behalf of the United States any governmental authority of the United States. The Indians ceded and relinquished all right, title, and interest in most of what is now western Washington, reserving certain specifically-stated off-reservation rights, such as the "right of taking fish, at all usual and accustomed grounds and stations . . . in common

with all citizens . . . ." There is no mention in the treaties of a duty to protect fish habitat.

5.32 Washington State was admitted to the Union in 1889. When Congress provided for the admission of the State of Washington, it said the State would be admitted "on an equal footing with the original States." The original States do not have the duty that the Tribes allege in the RFD or the duty that the United States alleges in its Response. There is no mention of such a duty in the 1889 Enabling Act.

5.33 The treaties do not give the Tribes or the United States the power to control the state legislative process so as to dictate to the people of the State of Washington or their representatives how they shall allocate scarce state resources.

VI. STATE'S DEFENSES

6.1 The United States and the Tribes are barred by principles of waiver and/or estoppel from seeking any relief related to culverts owned by the Washington Department of Natural Resources on roads within lands covered by the DNR's Habitat Conservation Plan.

6.2 The United States and the Tribes are barred by principles of waiver and/or estoppel from seeking any relief related to culverts on lands covered by the State's Forests and Fish Report.

6.3 The United States and the Tribes are barred by principles of waiver and/or estoppel from seeking any relief related to the State's design, construction, and maintenance of culverts on federal-aid highways and on other state highways designed,

constructed, and maintained in accordance with the standards for federal-aid highways.

6.4 The United States and the Tribes are barred by principles of waiver and/or estoppel from seeking any relief related to the State's installation of culverts under nationwide permits or individual permits issued by the United States Army Corps of Engineers.

6.5 The United States and the Tribes are barred by principles of waiver and/or estoppel from seeking any relief related to the State's installation of culverts in projects that have been the subject of consultation under Section 7 of the Endangered Species Act.

6.6 The United States and the Tribes are barred by principles of waiver and/or estoppel from seeking any relief related to culverts covered by routine road maintenance activities under a program substantially similar to that of the Oregon Department of Transportation.

6.7 The United States and the Tribes are barred by principles of waiver and/or estoppel from seeking any relief related to culverts that conform to the design standards of the Washington Department of Fish and Wildlife in existence as of March 3, 1999.

6.8 If the Tribes have any cause of action under the treaties with respect to state-owned culverts, it is against the United States for breach of the duty to ensure that the Tribes' treaty rights are not abrogated or impinged upon when federal executive agencies carry out their responsibilities. The Tribes have no cause of action against the State.

6.9 The Court lacks subject matter jurisdiction over some of the claims in the RFD and in the United States' response because there is no case or controversy related to the State's current culvert design, construction, and maintenance standards.

6.10 The Tribes and the United States lack standing to seek relief related to the State's current culvert design, construction, and maintenance standards.

6.11 The law of the case doctrine bars the claims in the RFD and in the United States' response.

6.12 The Equal Footing Doctrine bars the claims in the RFD and in the United States' response.

6.13 The political question doctrine bars the claims in the RFD and in the United States' response.

6.14 The claims are non-justiciable because the treaties are not self-executing with respect to the rights alleged in the RFD and the United States' response.

6.15 Any State obligation to the Tribes or the United States is satisfied by compliance with the federal Endangered Species Act and other federal statutes and regulations.

6.16 The Tribes and the United States are not entitled to retroactive remedial equitable relief that is appropriate only for constitutional violations.

6.17 The relief that the Tribes and the United States demand is unconstitutional under the provisions of the United States Constitution, including Article IV, Section 4.

6.18 The requested relief would require federal court intrusion into legislative decisions reserved to the State under principles of federalism, state sovereignty and the 10th Amendment to the United States Constitution.

6.19 The claims in the RFD are barred by the 11th Amendment to the United States Constitution.

6.20 The RFD and the United States' response fail to state a claim upon which relief can be granted.

VII. CROSS-REQUEST FOR DETERMINATION AGAINST THE UNITED STATES AND COUNTER-REQUEST FOR DETERMINATION AGAINST THE TRIBES

The State avers as follows:

7.1 This Court has jurisdiction over the State's Cross- and Counter-Requests For Determination under 28 U.S.C. § 1331 and the Court's June 22, 1993 Order Dismissing Without Prejudice Phase II and Certain Subproceedings in Phase I.

7.2 If the actions of the State of Washington that are the subject of the RFD violate any treaty-based duty owed the Tribes, the executive branch of the United States government has violated its duty to ensure that the Tribes' treaty rights are not abrogated or impinged upon by funding, authorizing, approving, or otherwise participating in the state actions that are the subject of the RFD.

7.3 If the treaties include a duty to protect fish habitat independent of laws passed by Congress, the United States has violated its duty to the Tribes

in failing to protect fish habitat on federally-owned lands.

7.4 If the treaties include a duty to protect fish habitat independent of laws passed by Congress, the plaintiff United States has unlawfully injured the State of Washington by, among other things, placing on the State a disproportionate burden to meet any such treaty-based duty.

7.5 If the treaties include a duty to protect fish habitat independent of laws passed by Congress, the United States has managed its lands in such a way as to create a nuisance that unfairly burdens the State of Washington.

7.6 If the treaties include a duty to protect fish habitat independent of laws passed by Congress, the Tribes have violated their duty to the State by failing to inventory and correct their own road-related fish passage barriers.

VIII. STATE'S DEMAND FOR JUDGMENT

WHEREFORE, the defendant State of Washington requests the following relief:

8.1 A judgment that the RFD and the United States' Response be dismissed and that the Tribes and the United States take nothing.

DECLARATORY JUDGMENT

8.2 A declaration that there is no treaty-based right or duty of fish habitat protection as described in the Tribes' RFD and in the United States' "Response."

8.3 In the alternative, should the Court conclude that the actions of the State of Washington

that are the subject of the RFD violate any treaty-based duty owed the Tribes, a declaration that the executive branch of the United States government has violated its duty to ensure that the Tribes' treaty rights are not abrogated or impinged upon by funding, authorizing, approving, or otherwise participating in the state actions that are the subject of the RFD.

8.4 In the alternative, should the Court recognize the existence of a treaty-based duty of fish habitat protection owed by the State of Washington, a declaration that the correlative duty runs to the Tribes and the United States as well.

8.5 In the alternative, should the Court recognize the existence of a treaty-based right or duty of fish habitat protection, a declaration that the United States has violated the duty owed the plaintiff Tribes.

8.6 In the alternative, should the Court recognize the existence of a treaty-based right or duty of fish habitat protection, a declaration that the United States has placed on the State a disproportionate burden of meeting any such treaty-based duty.

8.7 In the alternative, should the Court recognize the existence of a treaty-based right or duty of fish habitat protection, a declaration that the United States has managed its lands in such a way as to create a nuisance that unfairly burdens the State of Washington.

8.8 In the alternative, should the Court recognize the existence of a treaty-based right or duty

of fish habitat protection, a declaration that the plaintiff Tribes have violated the duty owed the State.

PROHIBITORY INJUNCTION

8.9 In the alternative, should the Court recognize the existence of a treaty-based right or duty of fish habitat protection, an order prohibiting the Tribes and the United States from constructing and maintaining any culverts that reduce the number of fish that would otherwise return to or pass through the usual and accustomed grounds and stations of any plaintiff Tribe.

MANDATORY INJUNCTION

Also in the alternative, should the Court recognize the existence of a treaty-based right or duty of fish habitat protection, the State requests that the Court enter Orders that:

8.10 Require the United States and each of its agencies, departments, officers, and agents to identify the location of all culverts constructed, maintained, or managed by the United States government or any of its agencies and departments including but not limited to the United States Forest Service, the United States Bureau of Indian Affairs, the United States Bureau of Land Management, the United States Fish and Wildlife Service, the National Park Service, and the United States military departments that diminish the number of fish that would otherwise return to or pass through any plaintiff Tribe's usual and accustomed fishing grounds and stations, before the State of Washington is required to conduct any such identification of state-owned culverts.

8.11 Require the United States and each of its agencies, departments, officers, and agents to fix and thereafter maintain all culverts built or maintained by any Federal agency or department, such that they do not diminish the number of fish that would otherwise return to or pass through the usual and accustomed fishing grounds and stations of the plaintiff Tribes, before the State of Washington is required to repair or remove any of its culverts.

8.12 Require each of the plaintiff Tribes to identify the location of all culverts constructed, maintained, or managed by that Tribe that diminish the number of fish that would otherwise return to or pass through any plaintiff Tribe's usual and accustomed fishing grounds and stations, on the same schedule applied to the State of Washington.

8.13 Require each of the plaintiff Tribes to fix and thereafter maintain all culverts built or maintained by that Tribe, such that they do not diminish the number of fish that would otherwise return to or pass through the usual and accustomed fishing grounds and stations of the plaintiff Tribes on the same schedule applied by the Court to the State of Washington.

OTHER RELIEF

8.14 The State of Washington further requests that the Court award the State its actual costs of litigation including reasonable attorneys' fees.

8.15 The State of Washington further requests all other relief the Court deems just and equitable.

Dated this *15th* day of March, 2001.

CHRISTINE O. GREGOIRE
Attorney General of Washington

s/Robert K. Costello
ROBERT K. COSTELLO, WSBA #12920
Senior Assistant Attorney General

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding No. 01-1 (Culverts) WASHINGTON'S REPLY IN SUPPORT OF MOTION FOR LEAVE TO SET UP COUNTERCLAIM BY AMENDMENT

I. ARGUMENT

A. Washington has Identified "Agency Action Unlawfully Withheld" Within the Waiver of Sovereign Immunity in the Administrative Procedure Act.

This case is not like *Norton v. Southern Utah Wilderness Alliance*, 124 S. Ct. 2373 (2004) ("*SUWA*"). Paragraphs 5.36, 5.43, 5.47, and 5.52 of Washington's proposed amended answer identify discrete agency actions—the Federal Agency Plaintiffs' failure to provide fish passage through specific culverts. The locations of some of these culverts are precisely known. *See* Wagner Decl. Ex. 2. The Federal Agency Plaintiffs' failure to fix these culverts is a discrete "failure to act" under 5 U.S.C. § 551(13). *SUWA*, 124 S. Ct. at 2379. It is an "agency action" under 5 U.S.C. § 702. See 5 U.S.C. §§ 551(13), 701(2); 706(1).

The United States' declarations show that the Forest Service alone has well over 200 fish-blocking culverts within the *United States v. Washington* case area. The United States *[caption page only]*

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

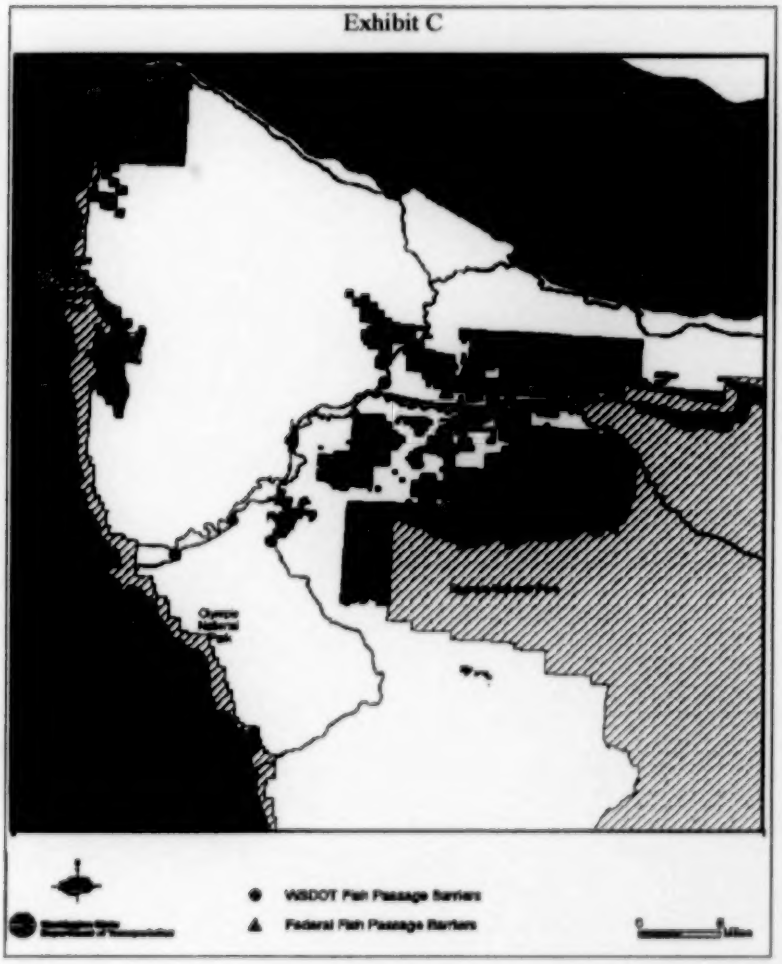
UNITED STATES OF AMERICA, et al., Plaintiff, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213M Subproceeding No. 01-1 (CULVERTS) DECLARATION OF PAUL J. WAGNER IN SUPPORT OF WASHINGTON'S REPLY IN SUPPORT OF MOTION FOR LEAVE TO SET UP COUNTERCLAIM BY AMENDMENT

I, Paul J. Wagner, declare as follows:

1. I am the Biology Branch Manager for the Environmental Services Office of the Washington State Department of Transportation ("WSDOT"). I have held this position for 11 years and I have worked for the WSDOT as a biologist for a total of 15 years. My duties include management of the WSDOT's Fish Passage Barrier Removal Program. I have a BS degree in natural history from Juniata College. The statements in this declaration are based on my personal knowledge and upon my review of official agency records.

2. One of the problems facing salmon and trout populations is an inability to migrate into usable stream habitat for rearing and spawning because of barrier culverts at stream crossings. Many roads in the State of Washington use culverts to span streams and *[caption page only]*

Exhibit C


WSDOT Fish Passage Barriers
Federal Fish Passage Barriers

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THE HONORABLE RICARDO MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, v. STATE OF WASHIGNTON, Defendant.	No. C70-9213M Subproceeding No. 01-1 (Culverts) DECLARATION OF MATTHEW J. WITECKI IN SUPPORT OF WASHINGTON'S MOTION FOR SUMMARY JUDGMENT

I, Matthew J. Witecki, declare as follows:

1. I am the Chief Hydraulic Engineer and Branch Manager of the Hydraulic Engineering Office for the Washington State Department of Transportation ("WSDOT"). I have held this position or its equivalent for 15 years and I have worked for the WSDOT as a hydraulic engineer for a total of 30 years. In all, I have worked for WSDOT since 1971. My duties include supervising the publication of the WSDOT Highway Run-off Manual and the WSDOT Hydraulics Manual, which prescribe design standards for hydraulic and drainage design work on WSDOT facilities. My other duties include assisting WSDOT bridge design office with the design of in-water bridge structures, and assisting other designers with highway drainage and water quality design issues. I was the principal author of the WSDOT

Hydraulics Manual (1989. Ed.). This manual establishes the design standards for all WSDOT drainage and hydraulic work. I have taught numerous training classes for designers and spoken at many conferences on hydraulic design. I have a BS degree in civil engineering from St. Martin's College (now University). Since then I have completed intensive training courses in statistics and hydrology for engineers sponsored by the Federal Highway Administration ("FHWA") as well as numerous continuing education classes in hydraulics, hydrology and related topics. The statements in this declaration are based on my personal knowledge.

2. Until the Washington Department of Fish and Wildlife ("WDFW") developed new culvert design guidelines specifically intended to accommodate fish passage, WSDOT's culvert design standards were based upon FHWA guidance. Specifically, WSDOT relied upon an FHWA publication entitled Hydraulic Engineering Circular #10 ("HEC #10"). The FHWA has issued many publications such as HEC #10 as guidance for state and local highway and road departments. The earliest version of HEC #10 in our library is dated March, 1965. The FHWA has updated the circular many times but the substance of the sizing procedures has remained virtually unchanged over the years. WSDOT has used the procedures identified in the then-current version of HEC #10 as the basis for Chapter Three of the WSDOT Hydraulic Manual, which relates to the use of hydraulic criteria for sizing culverts. The WSDOT manual contains the same culvert sizing charts and nomographs originally set forth in HEC #10.

3. During the course of my career, I have reviewed the hydraulic design manuals used by several other state highway agencies. All of those manuals used HEC #10 as the basis for culvert sizing protocols. I know that concrete, plastic, and corrugated metal pipe manufacturers all recognize, accept, and support the protocols contained in HEC #10 for the design of road culverts. The protocols and techniques set forth in HEC #10 are generally accepted as the industry standard for the design of road culverts.

4. In the early 1990's, WDFW notified WSDOT that in some circumstances, culverts designed according to the guidelines in HEC #10 failed to provide for adequate fish passage. A number of interagency meetings took place and ultimately WSDOT found the WDFW's position compelling and adopted the WDFW fish passage culvert design standards. We modified the Hydraulic Manual and our training to reflect the WDFW's fish-friendly design methods.

5. Virtually all of the WSDOT culverts identified as barriers to fish passage were designed according to the FHWA design standards promulgated in HEC #10. At no time did FHWA notify WSDOT that the federal design standards failed to provide fish passage or that culverts designed pursuant to the standards might violate treaty fishing rights. Although I understand that it is considering revisions to its culvert design standards, the FWHA has not officially modified HEC #10 to better provide for fish passage. Because the methods set forth in HEC #10 were considered the industry design standard, WSDOT would have adopted any fish

passage-related design improvements identified by the FHWA.

I declare under penalty of perjury that the foregoing is true and correct.

DATED this *4* day of August, 2006.

s/Matthew J. Witecki
MATTHEW J. WITECKI

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding 01-1 (Culverts) DECLARATION OF MARY E. JONES RE: WASHINGTON'S MOTION FOR SUMMARY JUDGMENT

I, MARY E. JONES, declare as follows:

1. I am a Paralegal with the Washington State Attorney General's Office, assigned to the Fish, Wildlife and Parks Division. As part of my duties, I am assigned to assist the attorneys handling the above litigation.

2. The State's Motion for Summary Judgment contains numerous footnotes referring to discovery in this matter. Due to the complexity of this case and the number of parties involved, tribal discovery answers were produced over the course of five years in response to three sets of discovery. Additionally, depositions were taken of 12 tribal witnesses.

3. To assist the court in finding discovery pages referred to in the footnotes, attached hereto (Attachment 1) is a footnote/discovery cross-reference table together with a seriatim numbered record containing true and correct copies of all discovery referenced in the footnotes.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this *9th* day of *August*, 2006.

s/Mary E. Jones
MARY E. JONES

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[Page 001]

HONORABLE JUDGE
BARBARA JACOBS ROTHSTEIN

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, v. STATE OF WASHINGTON, et al., Defendants.	Civil No. C70-9213 Sub-Proceeding No. 01-01 (Culverts) PLAINTIFF-INTERVENOR TRIBES' ANSWERS AND RESPONSES TO WASHINGTON'S FIRST DISCOVERY REQUESTS

* * * * *

[Page 0017]

INTERROGATORY NO. 40: Please identify the quantity of fish that you contend would enable each Tribe to achieve a moderate living from treaty fisheries.

ANSWER: The Tribes make no contention as to the quantity of fish that would enable each Tribe to achieve a moderate living from its fisheries. This Court has held that, as of 1994, the Tribes were not making a moderate living. The Tribes are aware of no facts which would suggest a different conclusion today. Given that the Tribes are not now making a moderate living, it is not necessary to speculate as to

what a moderate living might be at some future date with unknown conditions. Furthermore, such

[Page 0018]

speculation would not lead to the discovery of admissible evidence.

* * * * *

INTERROGATORY NO. 43: With respect to each Tribe how many fish are required to provide a moderate living?

[Page 0019]

ANSWER: Unknown.

INTERROGATORY NO. 44: With respect to each Tribe, when was the last time that the Tribe obtained a moderate living from fishing?

ANSWER: Unknown.

INTERROGATORY NO. 45: Please describe in detail how the State can determine whether any Tribe has achieved a moderate living from the fishery.

ANSWER: See Answer to Interrogatory No. 40.

INTERROGATORY NO. 46: Please describe in detail how the State can determine whether a Tribe's inability to achieve a moderate living from the fishery is attributable to State-owned fish passage barrier culverts or to some other cause.

ANSWER: Because the Tribes are not achieving a moderate living from their fishing, any diminution of harvestable fish attributable to State owned culverts contributes to the Tribes' inability to earn a moderate living.

* * * * *

[Page 0020]

ANSWERS AND RESPONSES dated this 7th day of September, 2001.

RAAS, JOHNSEN & STUEN, P.S. OFFICE OF SPECIAL COUNSEL

s/Daniel A. Raas

DANIEL A. RAAS, WSBA #4970
Counsel for the Lummi Indian Tribe
Tribal Coordinating Counsel

KANJI & KATZEN, PLLC

s/Phillip E. Katzen by DAR

PHILLIP E. KATZEN, WSBA #7835
Co-Counsel for the Suquamish, Jamestown, Lower Elwha, Pt. Gamble Bands of S'Klallams, Nisqually, Nooksack, Sauk-Suiattle, Skokomish, Squaxin Island, Stillagaumish, and Upper Skagit Tribes
Tribal Coordinating Counsel

MORISSET SCHLOSSER AYER et al.

s/Mason D. Morisset by DAR

MASON D. MORISSET, WSBA #273
Counsel for the Tulalip Tribe
Tribal Coordinating Counsel

* * * * *

[Page 0051]

HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, v. STATE OF WASHINGTON, et al., Defendants.	Civil No. C70-9213 Sub-Proceeding No. 01-01 (Culverts) PLAINTIFF-INTERVENOR TRIBES' ANSWERS AND RESPONSES TO WASHINGTON'S THIRD DISCOVERY REQUESTS

* * * * *

[Page 0052]

INTERROGATORY NO. 70: Do you contend that the Stevens Treaties reserve a fish passage easement or servitude in the lands that the Tribes ceded in Article I of each of the Stevens Treaties?

ANSWER: Objection. Interrogatory is vague and ambiguous. The term "fish passage easement or servitude" is not defined. Also, the scope of the easement or servitude that is the subject of this Interrogatory is unknown so that it cannot be answered without assumptions and speculation as to the State's meaning. In addition, the usual and

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accustomed fishing grounds and stations of the Tribes are neither limited nor circumscribed nor even meaningful in reference to the lands ceded by the Tribes in the Stevens Treaties.

Notwithstanding these objections, the Tribes contend that the Stevens Treaties secure to them the "right of taking fish" which imposes a duty upon the State to refrain from diminishing the number of fish that would otherwise return to or pass through the tribe's usual and accustomed fishing grounds and stations by, among other things, blocking fish passage to the extent that such diminishment would impair the tribes' ability to earn a moderate living from the fishery. This could be characterized as a negative easement or negative servitude.

* * * * *

[Page 0063]

INTERROGATORY NO. 98: If the court grants all the relief you request in your Request For Determination, will the Tribes be able to earn a moderate living from the fishery?

ANSWER: Objection. Interrogatory requires speculation and assumption on a variety of issues, including the impacts of the granted relief over an extended time and the effectiveness of other current and future restoration and conservation efforts.

Notwithstanding these objections, as ¶ 4.1 of our Request For Determination implies, correcting the many state-owned culverts that diminish the number of fish that would otherwise return to or pass through the tribe's usual and accustomed fishing

grounds and stations would enhance the ability of the Tribes to earn a moderate living from their fisheries.

* * * * *

INTERROGATORY NO. 100: Have the Tribes collectively or any individual Tribe or Tribes ever earned a moderate living from the fishery?

ANSWER: We do not have enough information to answer this Interrogatory.

* * * * *

[Page 0084]

ANSWERS AND RESPONSES dated this 27th day of May, 2005.

RAAS, JOHNSEN & STUEN, P.S. OFFICE OF SPECIAL COUNSEL

DANIEL A. RAAS, WSBA #4970
Counsel for the Lummi Indian Tribe
Tribal Coordinating Counsel

KANJI & KATZEN, PLLC

PHILLIP E. KATZEN, WSBA #7835
Co-Counsel for the Suquamish, Jamestown, Lower Elwha, Pt. Gamble Bands of S'Klallams, Nisqually, Nooksack, Sauk-Suiattle, Skokomish, Squaxin Island, Stillagaumish, and Upper Skagit Tribes
Tribal Coordinating Counsel

MORISSET SCHLOSSER AYER et al.

MASON D. MORISSET, WSBA #273
Counsel for the Tulalip Tribe
Tribal Coordinating Counsel

* * * * *

[Page 0097]

The Honorable
Barbara Jacobs Rothstein

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, et al., Defendants.	CIVIL NO. C70-9213 Sub-Proceeding No. 01-1 (Culverts) WASHINGTON's FIRST DISCOVERY REQUESTS TO PLAINTIFF UNITED STATES AND RESPONSE THERETO TOGETHER WITH INITIAL DISCLOSURES

* * * * *

[Original page 5]

INTERROGATORY NO. 28: If the answer to Interrogatory No. 26 is yes, please particularly identify all facts that support your contention that the State of Washington has violated the duty to refrain from diminishing the number of fish that would otherwise return to or pass through the Tribes' usual and accustomed fishing grounds and stations.

ANSWER: Not applicable. See response to Interrogatory No. 26 which does not call for a "yes or no" answer. Furthermore, we object on the basis that you mis-characterize the United States' contention.

INTERROGATORY NO. 29: Do you contend that the Stevens Treaties impose a duty upon private

parties to refrain from diminishing the number of fish that would otherwise return to or pass through the Tribe's usual and accustomed fishing grounds and stations to the extent that such diminishment would impair the Tribes' ability to earn a moderate living from the fishery?

ANSWER: Objection. Neither the Tribes nor the United States in this sub-proceeding have made any claims against private parties, and thus an answer to this Interrogatory would not lead to the discovery of relevant evidence. Furthermore, to the extent this interrogatory seeks the legal research or analysis of counsel, it is objectionable under the work product doctrine.

INTERROGATORY NO. 30: Do you contend that the Stevens Treaties impose a duty upon the State of Washington to refrain from diminishing the number of fish that would otherwise return to or pass through the Tribes' usual and accustomed fishing grounds and stations, if such diminishment did not impair the Tribes' ability to earn a moderate living from the fishery?

ANSWER: No.

INTERROGATORY NO. 31: Do you contend that a Tribe has a right to relief from all State or State-authorized environmental degradation of fish habitat that interferes with a Tribe's ability to achieve a moderate living from the fishery?

ANSWER: No. The United States' contentions in this sub-proceeding are set forth in the United States' Response to Request for Determination, and relate

solely to state-owned

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culverts. Other "State or State-authorized environmental degradation of habitat that interferes with a Tribe's ability to achieve a moderate living from the fishery" is not at issue, and as the Court of Appeals has instructed, such State conduct and any State obligation or tribal rights to relief would depend for their precise legal formulation on all of the facts presented by a particular dispute. Moreover, an Indian tribe may have "a right to relief" under any other applicable law in addition to the treaty rights at issue here.

INTERROGATORY NO. 32: For each Tribe, please particularly identify all actions that the Tribe has taken to preserve and enhance the fishery occurring within that Tribe's tribal land.

ANSWER: Objection. This interrogatory it is overbroad, vague, ambiguous, unduly burdensome, oppressive and not calculated to lead to admissible evidence. Without waiving the foregoing objection, the United States notes that each Tribe engages in continuing actions to preserve and enhance its fisheries, including participation in management activities pursuant to the Magnuson Fisheries Management Act, participation in annual management planning with other tribes and the State of Washington, participation in hatchery and rearing operations, participation in habitat improvement and protection activities, participation in water quality and water permitting activities and numerous other actions all designed to preserve and enhance fisheries

and habitat in general throughout the case area as well as in its tribal lands.

See also documents produced in response to Request for Production No. 8.

INTERROGATORY NO. 33: Do you contend that prior to the execution of the Stevens Treaties, the Tribes had developed systems and institutional arrangements for the allocation and protection of fish resources within lands and waters used by the Tribes?

ANSWER: Yes.

REQUEST FOR PRODUCTION NO. 30: If the answer to Interrogatory 33 is yes, please produce for inspection and copying all documents supporting your contention that before the

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Stevens Treaties were executed, the Tribes developed systems and institutional arrangements for allocation and protection of fish resources within lands and waters used by the Tribes.

RESPONSE: In part these documents are the subject of expert witness testimony and will be produced in due course. In part these documents are referenced in Exhibits USA-20-30 and USA 53, and in the record and documents supporting FF 3 and 6, 384 F. Supp. at 350-1. see also FPTO §3-33.

INTERROGATORY NO. 34: If the answer to the preceding interrogatory is yes, please identify all facts supporting your contention.

ANSWER: In part these facts are the subject of expert witness testimony and will be stated in due course. In part these facts are referenced in Exhibits USA-20-30

and USA 53, [and others] and in the record and in the other documents supporting FF 3 and 6. see also FPTO §3-33.

INTERROGATORY NO. 35: (a) Do you contend that the Stevens Treaties secure to the Tribes a right to be supplied with sufficient fish so as to enable the Tribes to achieve a moderate living from treaty fisheries? (b) Do you contend that the Treaties secure to the Tribes a right to be supplied with sufficient fish to satisfy the Tribes' present and future needs for a subsistence and livelihood?

ANSWER: Objection. The phrase "to be supplied with" is ambiguous and could be read to equate treaty rights with a government entitlement or a "supply of fish." Without waiving the objection, the United States makes neither contention. The United States' contentions in this sub-proceeding are set forth in the United States' Response to Request for Determination, and relate solely to state-owned culverts. Furthermore, the United States does not contend that the Treaties by themselves reserve to the tribes a right "to be supplied with sufficient fish * * *." See United States Opposition to Washington's Motion for Judgment on the Pleadings re: Law of the Case, at 2-3 (filed July 26, 2001). The supply of fish available to treaty fishers is subject to natural fluctuations in abundance. Other laws or agreements may require other things,

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including compensation or mitigation for fishery losses resulting from habitat destruction, overfishing or other human caused factors.

INTERROGATORY NO. 36: If your answer to either part of the preceding interrogatory is yes, please identify all facts supporting your contention that the treaties secure to the Tribes a right to be supplied with sufficient fish so as to enable the Tribes to achieve a moderate living from treaty fisheries or to satisfy the Tribes' present and future needs for a subsistence and livelihood.

ANSWER: Not applicable. See Response to Interrogatory No. 35.

REQUEST FOR PRODUCTION NO. 31: If your answer to either part of Interrogatory No. 35 is yes, please produce for inspection and copying all documents supporting your contention that the treaties secure to the Tribes a right to be supplied with sufficient fish so as to enable the Tribes to achieve a moderate living from treaty fisheries or to satisfy the Tribes' present and future needs for a subsistence and livelihood.

RESPONSE: Not applicable. See Response to Interrogatory No. 35.

INTERROGATORY NO. 37: Please identify all facts supporting the contention at ¶3.13 of the Tribes' Request for Determination that the "[s]uch a reduction in the number of fish available to the plaintiff Tribes impairs the Tribes' ability to achieve a moderate living from their treaty fisheries" or that formed the basis for your decision to "admit" that contention in ¶3.13 of the United States' Response.

ANSWER: The United States is aware of no facts which would support a denial of the contention in ¶3.13. It logically follows, moreover, that if the

quantity of fish available for harvest by the Tribes declines, the tribes' ability to earn a moderate living from fishing would likewise decline. As this Court has held as a matter of fact in Sub-proceeding 89-3, the Tribes are not now able to obtain a moderate living from their fisheries; the reduction in available fish caused by state owned culverts that diminish fish runs thus impairs the Tribes' ability to

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achieve a moderate living from their fisheries.

REQUEST FOR PRODUCTION NO. 32: Please produce for inspection and copying all documents supporting the contention at ¶3.13 of the Tribes' Request for Determination that "[s]uch a reduction in the number offish available to the plaintiff Tribes impairs the Tribes' ability to achieve a moderate living from their treaty fisheries" or that formed the basis for your decision to "admit" that contention in ¶3.13 of the United States' Response.

RESPONSE: The United States admitted the contention because this Court has ruled that the Tribes are not now making a moderate living from their treaty fisheries and it follows that reductions in the number of fish available for harvest would impair the Tribes ability to do so.

INTERROGATORY NO. 38: Please identify the quantity of fish that you contend would enable each Tribe to achieve a moderate living from treaty fisheries.

ANSWER: The U.S. makes no contention as to the quantity of fish that would enable each Tribe to achieve a moderate living from treaty fisheries. This

Court has held that, as of 1994, the plaintiff-Tribes were not making a moderate living. We are aware of no facts which would suggest a different conclusion today. Given that the Tribes are not now making a moderate living, it is neither necessary nor possible to speculate as to what a moderate living might be at some future date with unknown conditions. Furthermore, because such speculation would not lead to the discovery of admissible evidence, the United States objects to this interrogatory.

REQUEST FOR PRODUCTION NO. 33: Please produce for inspection and copying all documents supporting your contention that the quantity of fish identified in your answer to Interrogatory 38 would enable each Tribe to achieve a moderate living from treaty fisheries.

RESPONSE: Not applicable.

INTERROGATORY NO. 39: With respect to the allegation in ¶3.14 of the Tribes' Request for Determination, please identify all facts supporting your contention that the Tribes are not able to achieve a moderate living from their treaty fisheries or your decision to admit that . . .

* * * * *

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INTERROGATORY NO. 42: With respect to each Tribe, when was the last time that the Tribe obtained a moderate living from fishing?

ANSWER: Unknown.

* * * * *

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INTERROGATORY NO. 82: Please describe what the Federal Highway Administration has done to ensure that the Tribes' treaty rights were not abrogated or impinged upon when it has set or approved design standards for federal-aid highways within the case area.

ANSWER: The FHWA Washington Division Office responds as follows:

Many factors are considered in setting design standards. We have not specifically looked at treaty rights, but the standards are intended to provide the maximum safety, efficiency, and durability for all users. Generally states that receive Federal aid monies must comply with the standards in the AASHTO Green Book on Federal-aid projects. However, FHWA has approved WSDOT's Design Manual to be used in lieu of the AASHTO Green Book.

Standards used for the design of roadway and roadside features, including drainage culverts, are contained in several State manuals (Design Manual, Roadside Design Manual, Highway Runoff Manual, Hydraulic Manual, Local Agency Guidelines, etc.). The FHWA approves all of these manuals and, therefore the design standards used by the State and local agencies for Federal-aid highway projects. When new standards are proposed, the FHWA uses standards developed by American Association of State Highway and Transportation Officials and others, best practices guides, etc., for determining the acceptability of new standards.

* * * * *

[Page 00110]

INTERROGATORY NO. 105: Please describe in detail how the State can determine whether a Tribe's inability to achieve a moderate living from the fishery is attributable to the State-owned fish passage barrier culverts or some other cause.

ANSWER: If the Tribes are not achieving a moderate living from their fishing, any diminishment of harvestable fish which is attributable to state-owned fish passage barrier culverts contributes to the Tribes' inability to earn a moderate living.

* * * * *

[Page 00121]

DATED this *7th* day of September, 2001.

s/Peter C. Monson
Peter C. Monson
U.S. Department of Justice
Environment & Natural
Resources Div.
Indian Resources Section
999 18th Street, Suite 945
Denver, CO 80202

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The Honorable
Barbara Jacobs Rothstein

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, et al., Defendants.	CIVIL NO. C70-9213 Sub-Proceeding No. 01-1 (Culverts) WASHINGTON's FIRST REQUESTS FOR ADMISSION TO PLAINTIFF UNITED STATES AND RESPONSE THERETO

* * * * *

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REQUEST FOR ADMISSION NO. 2: Please admit that the reduction in productive fish habitat caused by culverts owned or controlled by federal agencies has diminished the amount of fish that would otherwise return or pass through the Tribes' usual and accustomed fishing grounds and stations.

RESPONSE:

Deny. The United States does not agree with the assumptions implicit in this request. There are many causes for reductions in the amount of fish that would return to or pass through tribal fishing grounds, including but not limited to state and private culverts, habitat degradation, dams, harvest, water quality, ocean conditions, and disease. Some culverts owned or controlled by federal agencies may be one cause in reduced quantities of fish produced from a particular stream, but information that such federal culverts are the cause of reduced fish runs is inconclusive and it is impossible to generalize. Moreover, after reasonable inquiry and evaluation, the United States lacks sufficient information to determine the quantity or quality of impact of

federally owned or controlled culverts on fish passage in the case area, and therefore cannot determine "the amount of fish" impacted.

* * * * *

[Page 00125]

DATED this *15th* day of March, 2002.

s/Peter C. Monson
Peter C. Monson
U.S. Department of Justice
Environment & Natural Resources Div.
Indian Resources Section
999 18th Street, Suite 945
Denver, CO 80202

* * * * *

[Page 00132]

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, et al., Defendants.	CIVIL NO. C70-9213 Sub-Proceeding No. 01-1 (Culverts) WASHINGTON'S THIRD DISCOVERY REQUESTS TO PLAINTIFF UNITED STATES AND RESPONSE THERETO TOGETHER WITH INITIAL DISCLOSURES

* * * * *

[Page 00135]

INTERROGATORY NO. 173: Have the Tribes or any individual Tribe or Tribes ever earned a moderate living from the fishery?

ANSWER: The United States does not have sufficient data from which to formulate a definitive response, but understand that the Tribes take the position that the answer is in the affirmative.

INTERROGATORY NO. 174: If your answer to Interrogatory No. 173 is yes, please identify the Tribe or Tribes and the approximate year or years during which the Tribe or Tribes earned a moderate living from the fishery.

ANSWER: The plaintiff Tribes contend that they frequently earned a moderate living from their fisheries until the mid to late 19th Century.

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Dated this 26*th* day of May 2005.

s/Peter C. Monson
Peter C. Monson
United States Department
of Justice
Environment and Natural
Resources Div.
Indian Resources Section
999 18th Street, Suite 945
Denver, CO 80202

THE HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, vs. STATE OF WASHINGTON, et al., Defendants.	Case No.: C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF RICHARD WHITE IN SUPPORT OF PLAINTIFF-TRIBES' MOTION FOR SUMMARY JUDGMENT

I, Richard White, hereby declare as follows:

1. I am currently Margaret Byrne Professor of American History in the History Department of Stanford University. I have a Ph.D in History, awarded in 1975 from the University of Washington, and have been teaching that topic at the university level since 1976.

2. I have published numerous academic papers and books on the history of the American West, including Native American history and issues. My CV is attached to this declaration.

3. I have been previously certified as an expert witness in U.S. v. Washington Subproceeding No. 89-3 (Shellfish).

4. I was asked by counsel for Plaintiff Tribes in this sub-proceeding to investigate the history of the Stevens Treaties including the intentions, expectations and understandings of the negotiators of

the Stevens Treaties, including Isaac Stevens, George Gibbs, other U.S. Commissioners, and the Indian negotiators, regarding both the immediate and future implementation of those agreements and the rights included. I prepared a written report setting forth the results of that investigation. This declaration is a summary of portions of that report.

5. During the winter of 1854 - 1855, Governor Isaac Ingalls Stevens, assisted by George Gibbs, and working under directions received from the federal Commissioner of Indian Affairs, George Manypenny, and his chief clerk, Charles Mix, negotiated three treaties with the Indian villagers living around Puget Sound. He then proceeded over the mountains to negotiate a treaty with inland bands and tribes of whom the current Yakama Nation is a successor. The treaties of Medicine Creek, Point-No-Point, Olympia, Point Elliott, and the treaty with the Makah contained virtually identical language, which would be echoed in the Yakama treaty:

> The right of taking fish at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses upon open and unclaimed lands; Provided, however, that they shall not take shellfish from any bed staked or cultivated by citizens, and that they shall alter all stallions not intended for breeding horses and shall keep up and confine the latter.

The treaties Stevens negotiated allotted only small land reservations to tribes on the Sound, "a few spots in their domains," and lacked any clause allowing the confinement of the Indians to the reservations. This, and the preservation of fishing rights, reflected the particular realities of life for both Indians and whites on Puget Sound and in greater Washington Territory.

6. The Stevens treaties recognized that by 1854 whites and Indians on Puget Sound had been in steady contact for over twenty years and in sporadic contact for much longer. Indians exchanged fish, furs, and game at Hudson's Bay Company posts, helped build forts, planted and harvested the crops of the Puget Sound Agricultural Company and herded sheep and cattle. Most worked seasonally. Some became plowmen and skilled carpenters and worked the year around. Later, as more American settlers arrived, Indians remained the primary labor force on the Sound. In an 1854 report surveying railroad routes from the Mississippi River to the Pacific Ocean, Gibbs noted that "they provided agricultural labor for the Americans as well as selling them potatoes; they provided them with transportation around the Sound; they carried the mail. And they sold fish and shellfish." The Stevens treaties recognized the interdependence of Indians and whites, on the Sound.

7. Although not all whites hoped that Indians and whites would continue to live and work together in Puget Sound after the adoption of the treaties, the men who gained Stevens' ear recognized the utility of Indians and wanted treaties which would both cede land and leave Indians available to participate in a larger interracial economy. As their meeting notes reveal, the treaty commissioners, including Stevens,

recognized that in negotiating with the Indians they were dealing with a people who:

> have been for a considerable time in contact with the whites, have acquired many of their habits and all their vices. They form a very considerable proportion of the trade of the Sound. Many are good laborers and are employed in families, vessels, lumberyards, mills and on farms. They catch most of our fish, supplying not only our people with clams and oysters but salmon to those who cure and export it.

Writing to Manypenny, Stevens argued for a plan that would create a number of small Indian reservations on the Sound, rather than relocating the tribes to a large reservation east of the Cascades or on the Pacific coast:

> There is a strong sympathy for the Indians among the whites. They are very useful in many ways, for transporting persons about the sound in their canoes, &c. Many of the men, as laborers, are very useful in chopping wood, plowing, driving wagons, &c. Some of the women wash clothes well, and in a variety of ways make themselves useful; and, if confined on reservations, under the direction of efficient agents, I am inclined to think that but little objection, if any, would be made by the whites.

The Stevens treaties sought to perpetuate the early relations between Indians and whites on the Sound.

8. One vital part of the relations that Stevens sought to perpetuate was Indian fishing, both for

subsistence and for trade. Stevens and the other treaty negotiators knew well that Puget Sound Indians relied heavily on their fisheries. Gibbs later observed in his 1877 ethnological monograph, *Tribes of Western Washington and Northwestern Oregon* that: "The principal food of the Indians on the west side of the Cascades may be briefly set down as fish, roots, and berries." Stevens made clear to both the Indians on Puget Sound and the white officials in Washington, D.C., that he planned to preserve this crucial resource. Treaty minutes reveal that Stevens assured the Indians at Point Elliott that the Great Father wished his Indians children "to have homes, pastures for your horses and fishing places." He wished them to learn to farm and to be educated. In return for selling their lands they would "be provided for all these things." At the same time, Stevens argued in his 1854 annual report to Manypenny that "It never could have been the intention of Congress that Indians should be excluded from their ancient fisheries.

9. The Indians themselves expressed the importance of fishing to their way of life, and Stevens and the other negotiators assured them of their continued access to the fisheries. Treaty minutes record that at Point-No-Point, One-lun-teh-tat, an "Old Sko-komish Indian" worried how they were to feed themselves once they ceded so much land to the whites, while Hool-hole-tan-akim also wanted to retain half the land. "Why," he asked, "should we sell all? We may become destitute. Why not let us live together with you?" In the face of such objections, Benjamin F. Shaw, the interpreter, reassured the Indians that they were "not called upon to give up

their old modes of living and places of seeking food, but only to confine their houses to one spot." And Michael Simmons, the special Indian agent for Puget Sound, explained that if they retained a large amount of land they would be confined to it, but that "when a small tract alone was left, the privilege was given of going wherever else they pleased to fish and work for the whites." In negotiations at Neah Bay, the Makah raised questions about the role that the fisheries were to play in their future. Stevens replied that "far from wishing to stop their fisheries, he intended to send them oil, kettles and fishing apparatus." What Stevens and his negotiators explicitly promised in response to Indian objections was access to the usual places for procuring food and continued economic exchange with the whites.

10. Stevens sought, as he described in a letter to Manypenny, to preserve Indian access to fisheries in part to "illustrate, not so much the power as the beneficence and paternal care of the government." Indeed, Manypenny himself argued in his 1854 report to the President that the government was obliged to uphold the treaty provisions. The "duty of the government," he wrote, was "plain." The government had to "fulfil (sic), with the greatest promptness and fidelity, every treaty stipulation with these Indians." As presented by the whites, the treaties required no choosing between fishing and farming, between reservations and education. They were to be part of a single, compatible whole. The Great Father, Stevens told the Indians at Point Elliott, wanted them to be farmers and artisans, he wanted them to be Christian and educate their children, but he "also wants you to take your fish and go back to the mountains and get

berries." Stevens and Gibbs worried that as whites took up claims under the Donation Land Act of 1850, they would drive Indians from their fishing grounds. The men argued that whites whose donation claims encompassed Indian fishing grounds had no right to monopolize them.

11. Stevens also sought to preserve Indian fishing rights to reduce the cost of implementing the treaties. In his instructions to Stevens, Mix had emphasized that whatever the form of the treaties, they should incur minimal expenses for the government. Mix began and ended his instructions on the same note of financial caution. He allowed Stevens to "exercise a sound discretion" in departing from the general instructions, but he was "to leave no question open, out of which difficulties may hereafter arise, or by means of which the Treasury of the United States may be approached." Stevens believed Mix wanted him to reduce the costs of negotiation and of annuity payments as well as to encourage Indian self-sufficiency. As the Treaty Commissioners noted in their meeting of December 26, 1854, "it was necessary to allow them to fish at all accustomed places" because this "was necessary for the Indians to obtain a subsistence." And securing the Indians a subsistence was critical if Stevens was to follow his very clear instructions to keep the cost of the treaty down. By guaranteeing the Indians a right to their share of the bounty of the land, rivers, and Sound, the treaties would enable them to feed themselves at little cost to the government.

12. Stevens also preserved Indian fishing rights to encourage continued Indian participation in the interracial economy of the Sound. By giving Indians

access to the commodities they not only used for subsistence but also sold on local markets, the Indians would remain close enough to white settlements to provide necessary labor and to continue to trade with whites. Stevens argued that the small reserves and the fishing and other rights preserved in Article III would allow "the Indians to catch salmon, gather roots, and berries, pasture their animals on unclaimed land and participate as heretofore in the labor of the Sound." After detailing to Commissioner Manypenny the centrality of Indian peoples to the economy of the Sound, Stevens argued that the provisions of Article III had "strict references" to their actual wants and "to the part they play and *ought to play hereafter* in the labor and prosperity of the territory (emphasis added)."

13. Stevens and the other negotiators believed that the abundant fisheries they had observed in Puget Sound would continue unabated forever. Early white accounts of these fisheries breathlessly reported that they were inexhaustible. J.G. Cooper and G. Suckly *[sic]*, who conducted natural history research in the Pacific Northwest between 1853 and 1857, reported in *The Natural History of Washington Territory* . . . , published in 1859, that "This arm of the sea [Observatory Inlet] was frequented at the time by such myriads of the salmon that a stone could not have reached the bottom without touching several individuals -- their abundance surpassing the efforts of the imagination to conceive." White settlers, like Indians, fed heavily on this abundant resource. Gibbs wrote his mother from Astoria, Oregon to report that salmon were "here in abundance. In fact we get hardly anything else & I don't eat any except particular

cuts." More, the negotiators, and other whites expected that Puget Sound's fisheries would continue to supply not just the subsistence needs of Indians and whites, but an expanding commercial market as well. Gibbs fully expected a commercial fishery to develop, and he gave no indication that settlement or industrial development on Puget Sound or elsewhere in Western Washington would diminish this fishery. It was not until the 1890s that scientists began to caution that salmon and other stocks might not remain abundant forever.

14. Stevens and the other negotiators anticipated that Indians would continue to fish the inexhaustible stocks in the future, just as they had in the past. Stevens specifically assured the Indians that they would have access to their normal food supplies now and in the future. At the Point Elliott Treaty, Stevens began by speaking of subsistence. "[A]s for food, you yourselves now, as in time past, can take care of yourselves." The question, however, was not whether they could now feed themselves, but rather whether in the future after the huge cessions that the treaties proposed the Indians would still be able to feed themselves. Stevens assured them that he intended that the treaty guarantee them that they could. "I want that you shall not have simply food and drink now but that you may have them forever." The negotiators uniformly agreed on the abundance of the fisheries, the dependence of the Indians upon them, their commercial possibilities, and their future "inexhaustibility." Stevens and Gibbs could both foresee and promote the commercial development of the territory, the creation of a commercial fishery by

whites, and the continuation of an Indian fishery, They did not see any contradiction between them.

15. For forty years following the adoption of the treaties, Indians continued to harvest fish for subsistence and trade as they had in years past, and local Indian agents encouraged their efforts. Twelve years after the treaties were negotiated, the Superintendent of Indian Affairs for Washington Territory reported that all the tribes lived by "farming, fishing and the chase." This system proved very durable. A special report by the Board of Indian Commissioners on Western Washington in 1874 predicted that Indians would continue to depend on fishing, logging, and wage labor, and any plan to consolidate the reservations should take this as well as the possibilities for agriculture into account. In 1880, the salmon fishery already formed one-third of the production of the West Coast fisheries, but it was as yet little developed in Puget Sound. "The whole Puget Sound region is very abundantly supplied with fish," the census reported, "but for want of a market the fisheries are little developed and has yet little commercial importance." Although there were now some Chinese, Italian, and Portuguese fishermen on the Sound, Indian peoples were still, twenty-five years after the treaties, the primary fishers on Puget Sound. The fisheries remained abundant. Until Indians were systematically deprived of their fishing rights and the fisheries began to decline in the late nineteenth and early twentieth centuries, the Indians remained self-supporting.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed this *10* day of August 2006, at *Redwood City*, California.

s/ Richard White
Richard White

THE HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, vs. STATE OF WASHINGTON, et al., Defendants.	Case No.: C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF JOSEPH R. TAYLOR III IN SUPPORT OF PLAINTIFF-TRIBES' MOTION FOR SUMMARY JUDGMENT

I, Joseph E. Taylor III, hereby declare as follows:

1. I am currently Associate Professor & Canada Research Chair in History and Geography at Simon Fraser University. I have a Ph.D in History, awarded in 1996 from the University of Washington, and have been teaching that topic at the university level since 1996.

2. My fields of specialization and experience include history of the North American West, environmental history, United States 19th and 20th century social and cultural history, American colonial history, history of science, and colonial Latin American history. I have published numerous academic papers and books on the history of the American West, including Native American history and issues. My CV is attached to this declaration.

3. I was asked by counsel for Plaintiff Tribes in this sub-proceeding to investigate the status of salmon populations in western Washington as of 1854-1855; describe the size and scope of impacts on those populations from non-Indian development and settlement, if any, as of that time; describe the public perception and understanding of the status of salmon/fish populations in western Washington as of 1854-55; and, describe the 1854-1855 public attitude and expectation regarding the future of western Washington salmon/fish populations in the future given the expectation for increased settlement and development. I prepared a written report setting forth the results of that investigation. This declaration is a summary of portions of that report.

4. During 1854 and 1855, Washington Territorial Governor Isaac I. Stevens negotiated the treaties of Medicine Creek, Point-No-Point, Olympia, Point Elliott and Neah Bay. In 1854-1855, white settlement and its environmental impact on Puget Sound remained modest, and the fisheries appeared to Indians and whites alike to be inexhaustible. Indeed, as white settlers arrived in the Puget Sound region, they consistently noted the size, diversity, and centrality of salmon in Northwest life, and they speculated about how best to develop commercial fisheries in the region. To the settlers, Puget Sound's salmon stocks appeared inexhaustible, if properly cared for. In 1845, Samuel Crockett noted in his journal that the "great quantities of fish found in the pacific [sic] waters are beyond description: the Salmon is the most plentiful and valuable fish taken here though their [sic] are different kinds of other fish that are very good." White settlers imitated the Indians

they encountered, embracing salmon as a crucial food resource and as a source of profit. In 1854-1855, both Indians and non-Indians assumed that salmon would continue to fulfill their subsistence and trade needs in the future.

5. During the period of treaty negotiations, the number of white settlers remained small and their settlements widely-dispersed. In November, 1853, Colonel J.P. Anderson conducted a territorial census and recorded only 3,965 non-Indians living in the case area. There were at that late date still nearly twice as many Indians as non-Indians living in Washington Territory. And, because they were so few and so isolated from one another, by 1854-1855 white settlers on Puget Sound had had little discernable impact on the region's environment. White settlers were anxious to profit from the region's rich fisheries. They were eager, too, to exploit its game, soil, minerals and timber. But by 1854-1855, white industry remained very limited and localized, and its environmental impact was too modest to noticeably degrade salmon habitat and damage salmon fisheries. Trappers had not yet killed enough beavers to impact salmon habitat; farmers had altered only a tiny fraction of the area by 1855, and had had no discernible impact on salmon runs; miners had had only a minimal impact on salmon runs in the study area; loggers were suffering through an industry recession during 1854-1855, and had not yet seriously damaged salmon runs. Although trapping, farming, mining and logging had already altered human settlement patterns and initiated important environmental changes by 1854-1855, none of these activities had yet created perceptible disruptions in Indian economies or in the

health of salmon runs by the period of treaty negotiations.

6. In the years immediately preceding the treaty negotiations, Puget Sound salmon habitat remained healthy. Salmon harvests in 1854-1855 were larger than usual, and white settlers in those years continued to celebrate the abundance of the catch. Settlers like James Swan continued to feed heavily on salmon. Never did white observers worry that the salmon fishery they so revered would ever decline. In late 1853, George Suckley, who was sent to Washington Territory to survey fish resources, wrote his brother John that, "We have, in the Sound, Salmon, Cod, and many other fish, Clams of various kinds, some of which attain the length of a foot or more." In his official report to Congress, *The Natural History of Washington Territory* . . . , published in 1859, he went further:

> Quite abundant as far south as San Francisco, we find these fish [salmon], as we proceed north, increasing in species and in numbers, until, in arriving at the Columbia river, and at the rivers near Vancouver's Island or the streams falling into Puget Sound, they form one of the most striking wonders of the region. There vast numbers of these fish, differing in anatomical peculiarities, species, and color, and changing much with age, sex, and condition, season of the year, or quality of the water, astonish by their number, and confuse with their variety.

While the arrival and activities of white settlers had begun to alter salmon habitats by 1854-1855, these

alterations had had no discernable impact on the size or stability of Pacific salmon populations; at the time of the treaty negotiations, Puget Sound's waters teemed with salmon.

7. During 1854-1855, white settlement had not yet damaged Puget Sound fisheries. During those years, Indians continued to harvest fish for subsistence and trade as they had in the past. Given the slow pace of white settlement and its limited and localized environmental impact, Indians had no reason to believe during the period of treaty negotiations that white settlers would interfere, either directly through their own harvests or indirectly through their environmental impacts, with Indian fisheries in the future. During treaty negotiations, Indians, like whites, assumed that their cherished fisheries would remain robust forever.

8. Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed this *11* day of August 2006, at *Seattle*, Washington.

s/Joseph E. Taylor III
Joseph E. Taylor III

THE HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, vs. STATE OF WASHINGTON, et al., Defendants.	Case No.: C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF ROBERT THOMAS BOYD IN SUPPORT OF PLAINTIFF-TRIBES' MOTION FOR SUMMARY JUDGMENT

I, Robert Thomas Boyd, hereby declare as follows:

1. I am currently employed as an anthropological consultant and professional writer. I also an adjunct associate professor in the Department of Anthropology at Portland State University. I have a Ph.D in Sociocultural Anthropology from the University of Washington, awarded in 1985.

2. My area of focus is Northwest Coast Native Americans (particularly Oregon and Washington), specializing in medical anthropology, ethnohistory, cultural ecology, culture contact and change, and demographic anthropology. I have published extensively on Native American anthropological issues in the Pacific Northwest and currently have book contracts with both the University of Washington Press and Columbia University Press. My CV is attached to this declaration.

3. I was asked by counsel for Plaintiff Tribes in this sub-proceeding to investigate the practices, if any, of Indian tribes in western Washington, at and before the treaties of 1854-55, intended to protect, preserve or improve the numbers of fish available for their harvest; and, the significance of any such practices in Indian life at that time. I prepared a written report setting forth the result of that investigation. This declaration is a summary of portions of that report.

4. The Puget Sound Indians with whom Isaac I. Stevens negotiated treaties in 1854 and 1855 – descendants of which make up the modern Nooksack, Lummi, Swinomish, Upper Skagit, Sauk-Suiattle, Tulalip, Stillaguamish, Suquamish, Muckleshoot, Puyallup, Nisqually, Squaxin, Skokomish, Port Gamble S'Klallam, Lower Elwha Klallam, Jamestown S'Klallam, Makah, Hoh and Quileute, and Quinault – relied heavily on the region's abundant salmon fisheries. The peculiarities of the salmon life cycle helped shape the structure of the Puget Sound Indian societies that relied upon them. Salmon hatch in freshwater streams and mature at sea. When ready to reproduce, they congregate at the mouths of their natal rivers, then proceed *en masse* upstream to spawn and die. Because migrating salmon do not feed, and therefore cannot be caught using bait, Indians harvested them with tools like weirs; because salmon require clean gravel and cool water to spawn, Indian taboos discouraged disturbing stream beds and muddying waters during runs; because salmon migrating *en masse*, Indian religious ceremonies celebrated the first salmon of the run to encourage other fish to follow. In pre-treaty Puget Sound, the life

of the Indian was intimately connected to that of his most cherished commodity, the salmon.

5. Pre-treaty Puget Sound Indian societies efficiently harvested vast quantities of salmon. Indians took salmon wherever they could, by whatever means possible. At the same time, Indian societies developed effective tools that managed this vital resource and protected it from depletion. Tribal communities carefully regulated fishing activities with weir builders or social rank, for example, determining who could fish, when they could fish, and amounts taken. Tribal myths encouraged Indians to share their catch and refrain from harvesting more than they needed. In the S'Klallam "Stingy Father" tale, for instance, a father who keeps all of his salmon to himself while his family starves is turned to stone. Indian rituals even discouraged keeping food from guests and strangers. Salmon caught in village weirs were shared throughout the Indian community, each member taking a share of the catch.

6. Pre-treaty Indian fishers also mitigated the impact of their efficient fishing technologies on stocks. Although Indian weirs – fences stretched across tributary streams – could easily kill all of the migrating fish that encountered them, Indian management practices prevented it. Indians periodically lifted their weirs to permit migrating fish to move upstream or to clean the weirs. Myths explained why: The Green River myth "North Wind and Storm Wind" relates what happened when Cold Wind "stretched a fish-weir of ice across the Duwamish River. No fish could get up the river past this trap. Further up the valley the people starved. They could get no fish to eat . . . . All the people were

killed." Those who followed Cold Wind's example could expect swift retribution. Other myths warned that upstream Indians might attack greedy downstream neighbors. A Quileute myth told of poisoning them with a salmon made of "snakes, lizards, frogs, toads, waterdogs." Worse, other myths warned that the salmon themselves might take offense if the weirs were not opened. The Skokomish believed that if they failed to open their weirs the salmon would not return the following year. Such regulations of fishing technology helped pre-treaty Indians preserve salmon fisheries.

7. Indian taboos also helped preserve salmon habitat. Before salmon started running, rivers were to be kept clear. No rubbish or food scraps were to be tossed in the river, no canoes were to be bailed out in it. Menstruating women were not to swim in its waters. Such prohibitions sought to ensure that salmon would want to return to their natal streams. If Tribal members adhered to such roles, returning salmon would find clean streams running in clear, cool water – just the conditions they required to spawn. Violating the taboos risked disturbing spawning grounds and turning salmon away in the future. Fewer returning salmon would, of course, reduce Tribal catches.

8. Other pre-treaty Puget Sound Indian rituals honored the salmon, endowing the fish with supernatural qualities. The First Salmon ceremony was widespread among Puget Sound Indians in the pre-treaty period. During the ceremony, a ritualist or his assistants took the first fish and carried it in a special manner to an alter on which it was displayed to the assembled village. The first fish was usually

placed with its head pointing upstream so the rest of the salmon would continue upstream and not turn back to the sea. The first fish was treated as an honored guest of high rank; the ritualist sprinkled it with eagle down or red ochre or other ritual material, and made a formulaic speech of welcome followed by songs or chants appropriate to greet a visiting chief. The fish was cooked by the ritualist or an assistant to the accompaniment of prayers and songs. Then, each person was given a sacramental taste and the bones of the first fish were returned to the water. After the ceremony, villagers might begin to fish for themselves. The Indians of Puget Sound intended that such a ceremony would ensure the continued abundance of the salmon fishery on which they depended, encouraging the salmon to return year after year.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed this *11* day of August 2006, at *Portland*, Oregon.

s/Robert Thomas Boyd
Robert Thomas Boyd

The Honorable Ricardo Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et.al. Plaintiff, vs. STATE OF WASHINGTON, Defendant	Case No.: C70-9213 M Subproceeding No. 01-1 (CULVERTS) DECLARATION OF KEITH LUTZ IN SUPPORT OF TRIBES' MOTION FOR SUMMARY JUDGMENT

1. I, Keith Lutz, residing at 7812 Huetter Ct. SW, Olympia WA 98512, DECLARE UNDER PENALTY OF PERJURY:

2. I am over the age of eighteen, a United States citizen, and am competent to testify as to the matters here set forth. I make this affidavit on the basis of my personal knowledge, skill, experience, training, education, and review of the Tribal harvest data. This affidavit is made by me for the purpose explaining how I derived the following tables of information related to Tribal salmon harvests as part of *United States v. Washington*, 01-1 (Culverts).

3. For the past 21 years (1985-Present), I have been a Fisheries Biologist for the Northwest Indian Fisheries Commission working with the Tribes on harvest management issues. During my employment with the NWIFC, I have participated on several joint State/Tribal technical teams including the North Sound Herring Technical Team, Puget Sound Spring

Chinook Technical Team, and serve as a technical advisor to the Tribes during the PFMC meetings that are held coastwide. My education includes a Bachelor of Science (BS) degree in Fisheries from Humboldt State University with a minor in Oceanography, obtained in 1983.

4. Attached hereto and incorporated herein by this reference are Tables 1 through 9 and Figures 1 through 8. For these Treaty Catch Data tables, I accessed and compiled data from the Treaty Fish Ticket (TFT) database that is created and maintained by the Quantitative Services Division at the Northwest Indian Fisheries Commission. Data queries for this data set were generated in May 2006.

5. In general, for some years after the 1974 Boldt decision, Tribal landings steadily increased as they were allocated and were able to harvest a larger portion of the available harvest. The available harvest levels were augmented by State and Tribal hatcheries that went into production to supplement/replace wild fish production lost to degraded habitat. In more recent years, the available harvest levels have declined substantially due to various causes including, but not limited to, the loss of production (natural and hatchery), habitat degradation, and poor ocean survival.

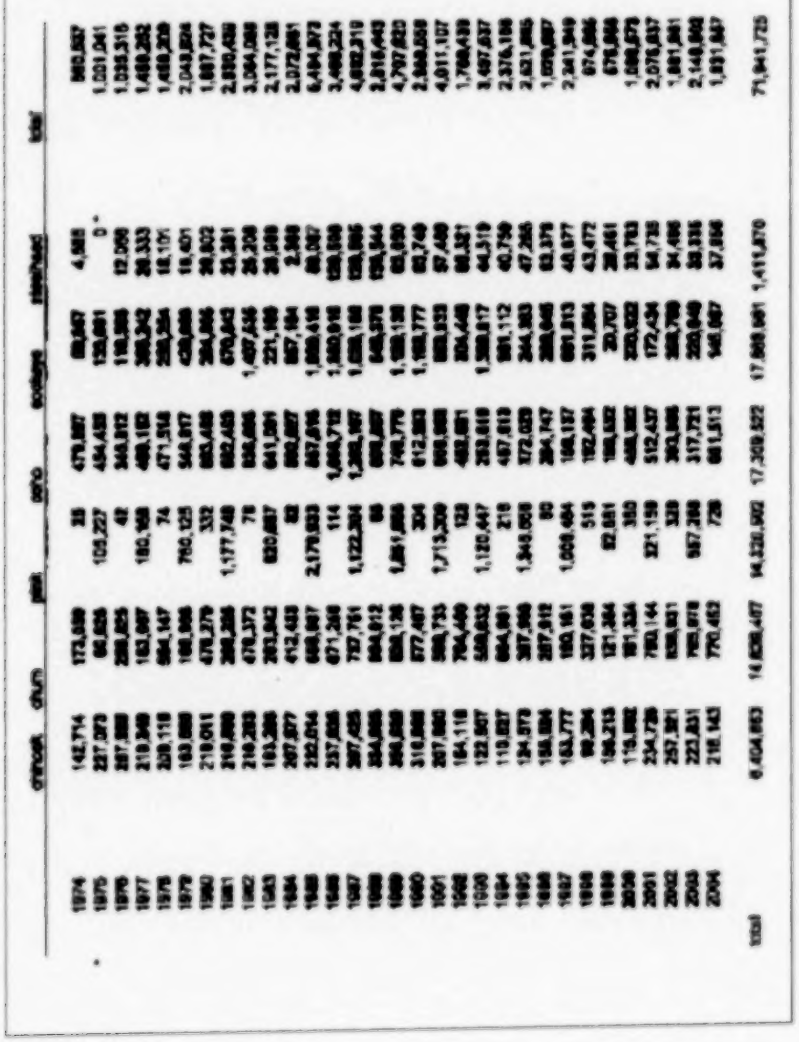
6. I declare under penalty of perjury and upon personal knowledge that the foregoing is true and correct based on the databases and information provided as part of this court case.

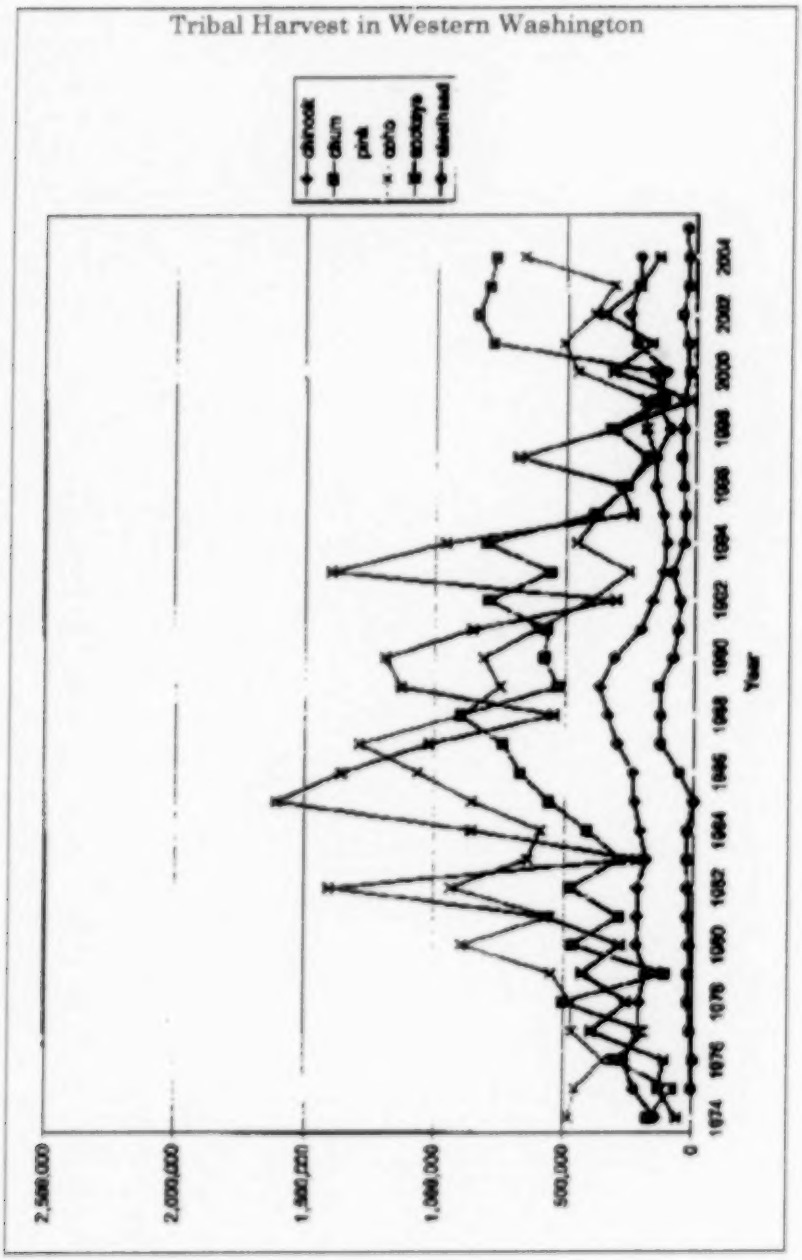
Date: *8/11/06*

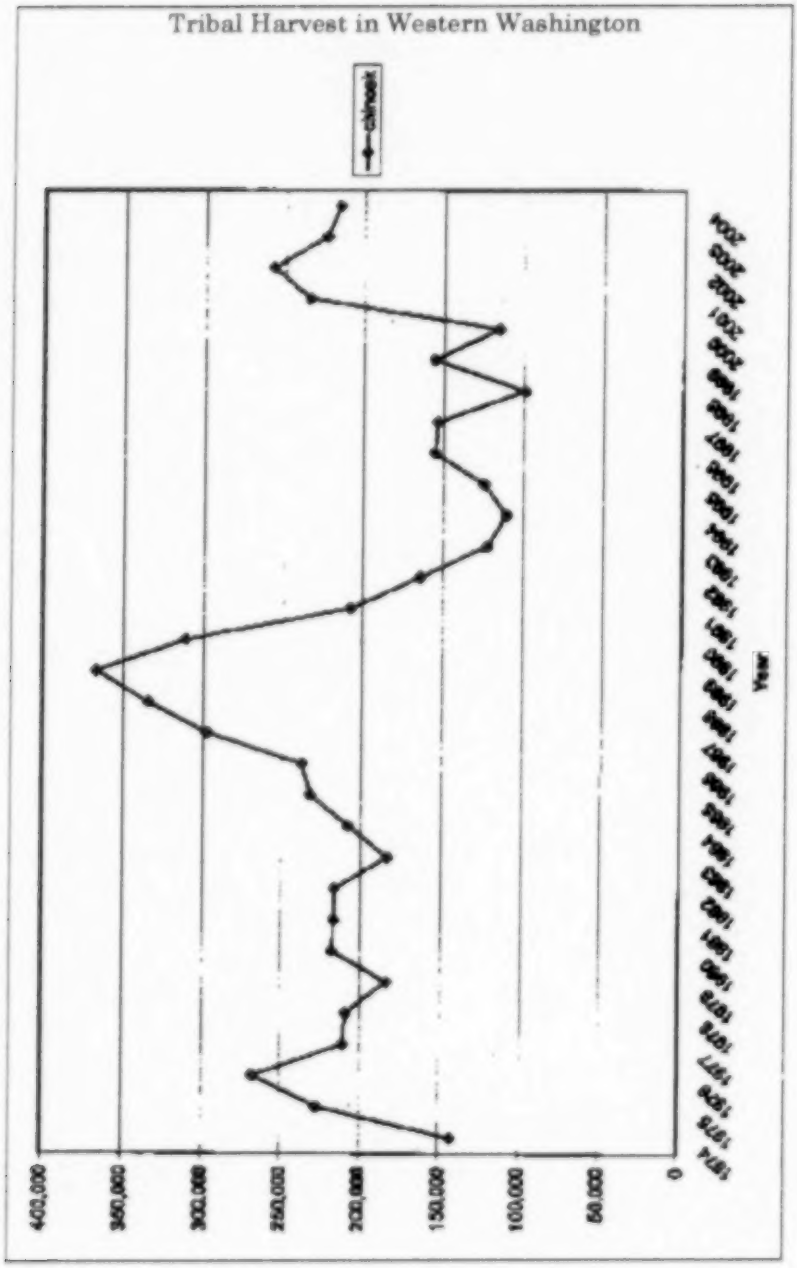
Name: *s/Keith Lutz*

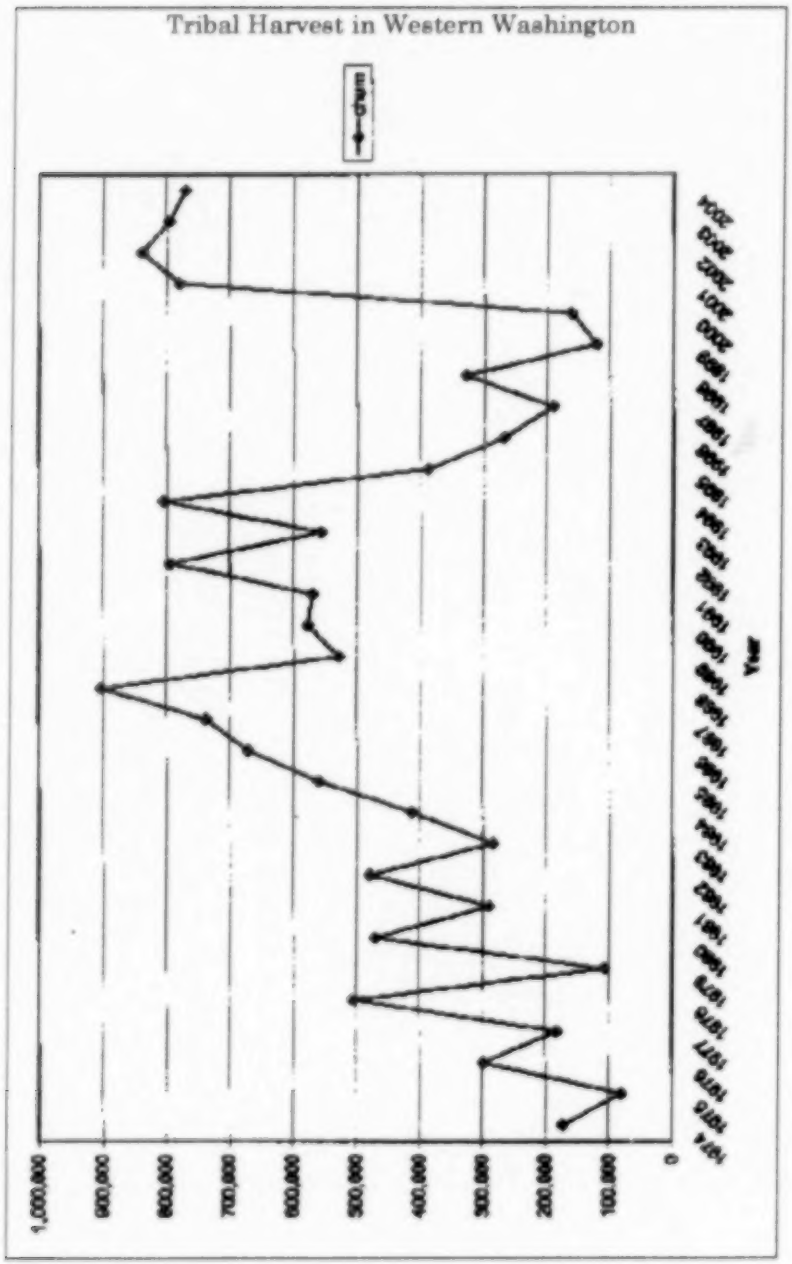
Keith Lutz

Table 1. Tribal harvest of salmon and steelhead in western Washington (Ocean, Coastal Rivers, Puget Sound and Puget Sound Rivers) from 1974-2004.




Tribal Harvest in Western Washington
chinook
chum
pink
coho
sockeye
steelhead
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004
Year


Tribal Harvest in Western Washington
chinook
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
Year


Tribal Harvest in Western Washington
Chum
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Year
1974
1975
1976
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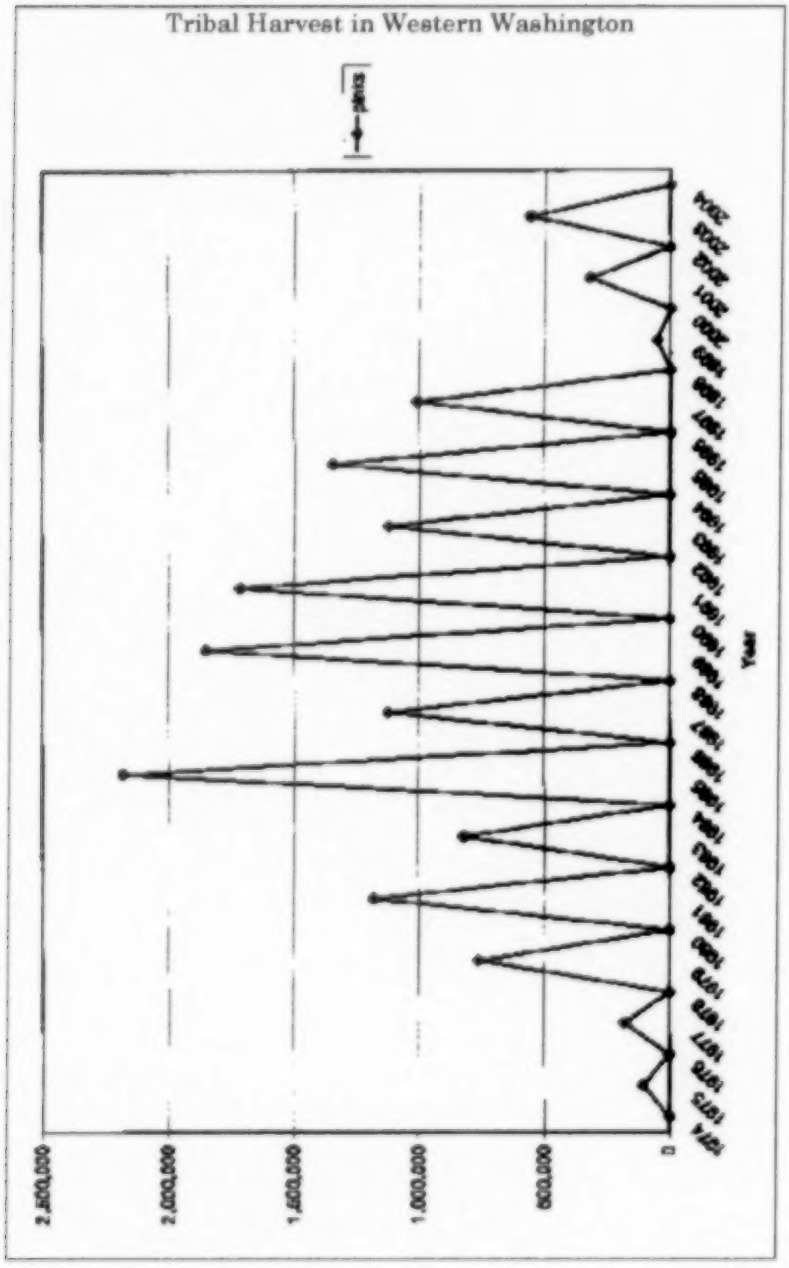
Tribal Harvest in Western Washington
coho
pinks
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
1974
1975
1976
1977
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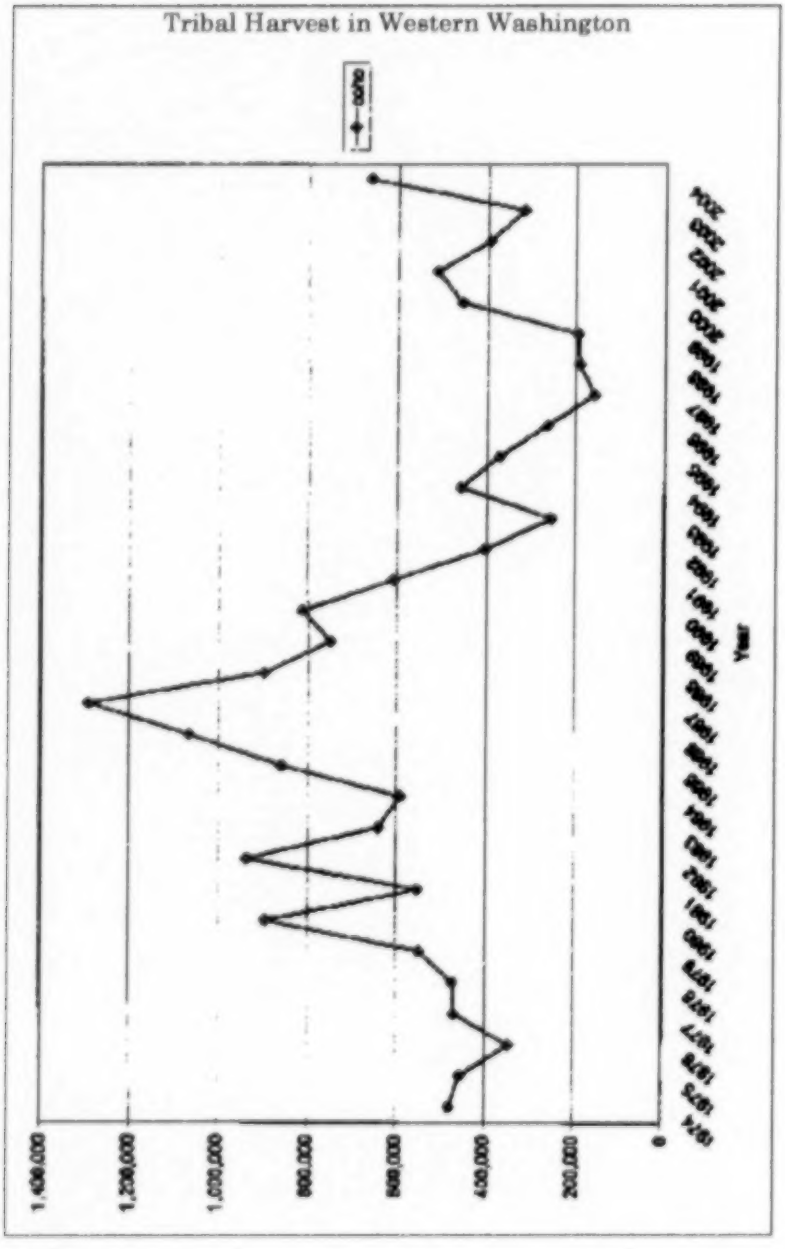
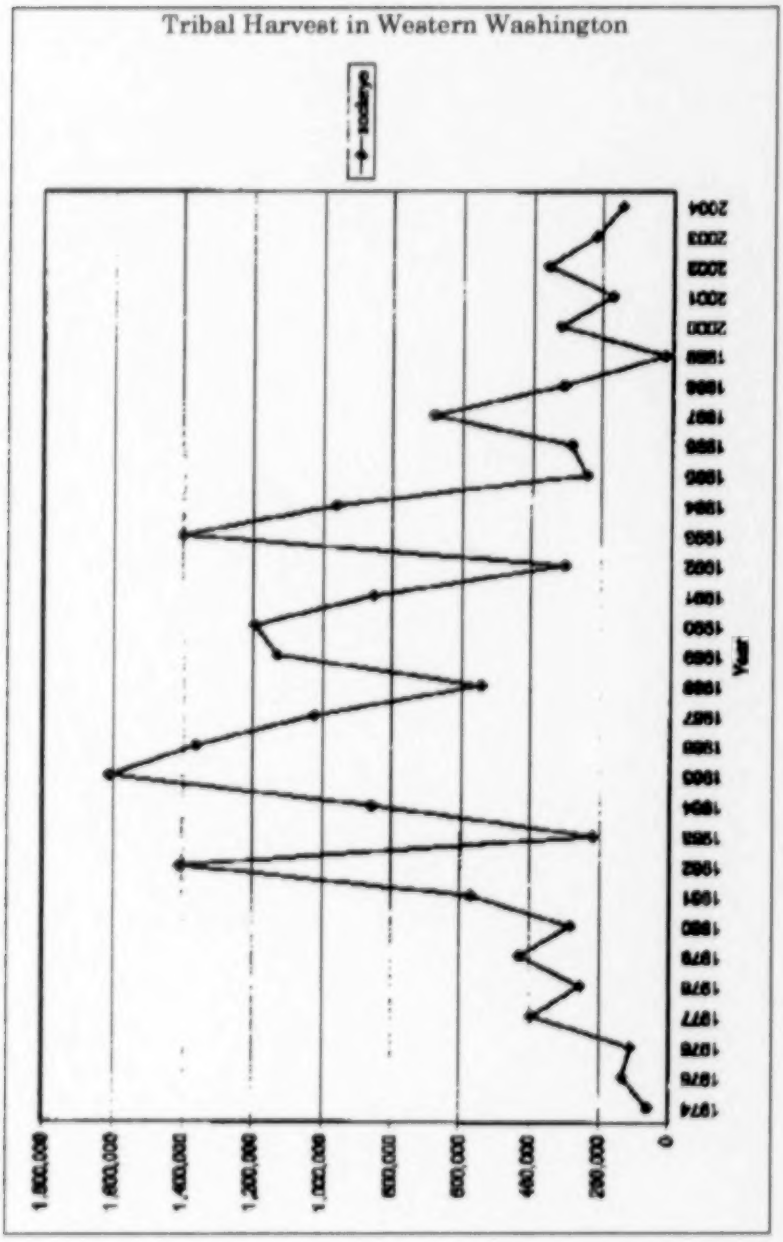
2004
year


Tribal Harvest in Western Washington
Year
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0


Tribal Harvest in Western Washington
Year
2004
2003
2002
2001
2000
1999
1998
1997
1996
1995
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1988
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1979
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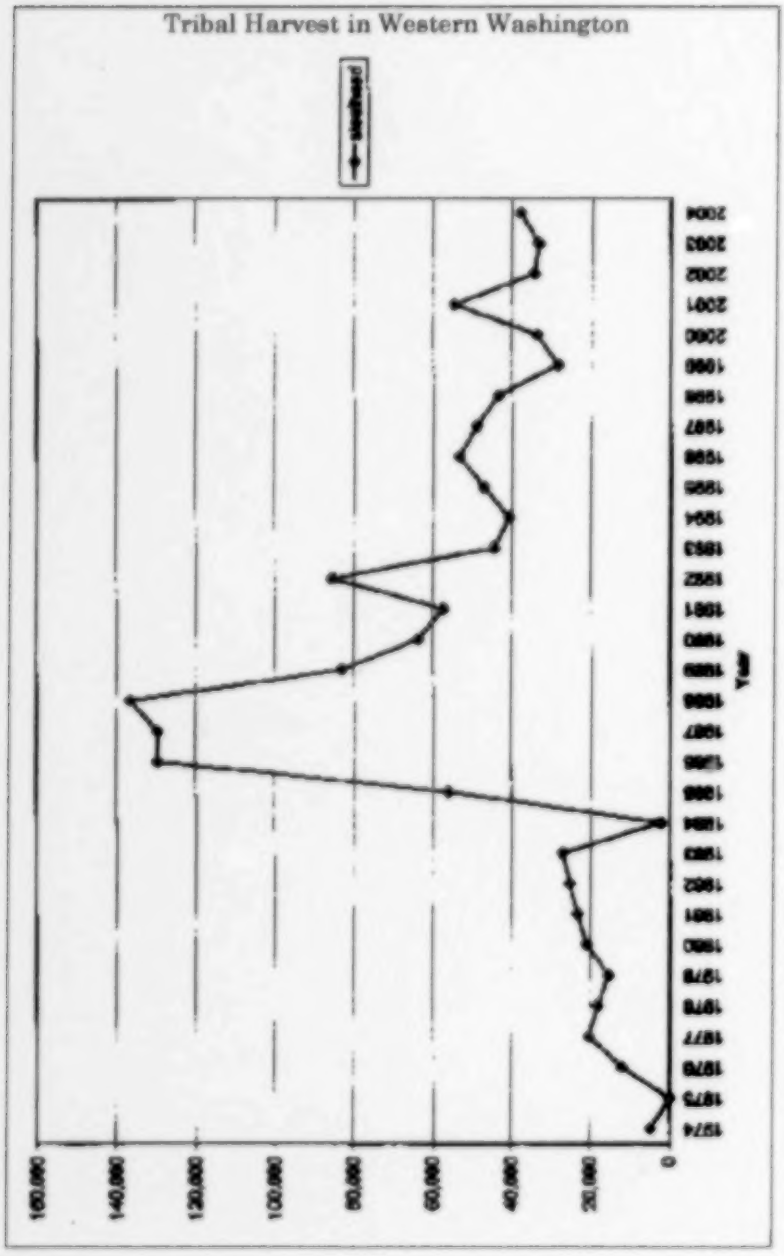
1977
1976
1975
1974
0


Tribal Harvest in Western Washington
steelhead
Year
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
1974
1975
1976
1977
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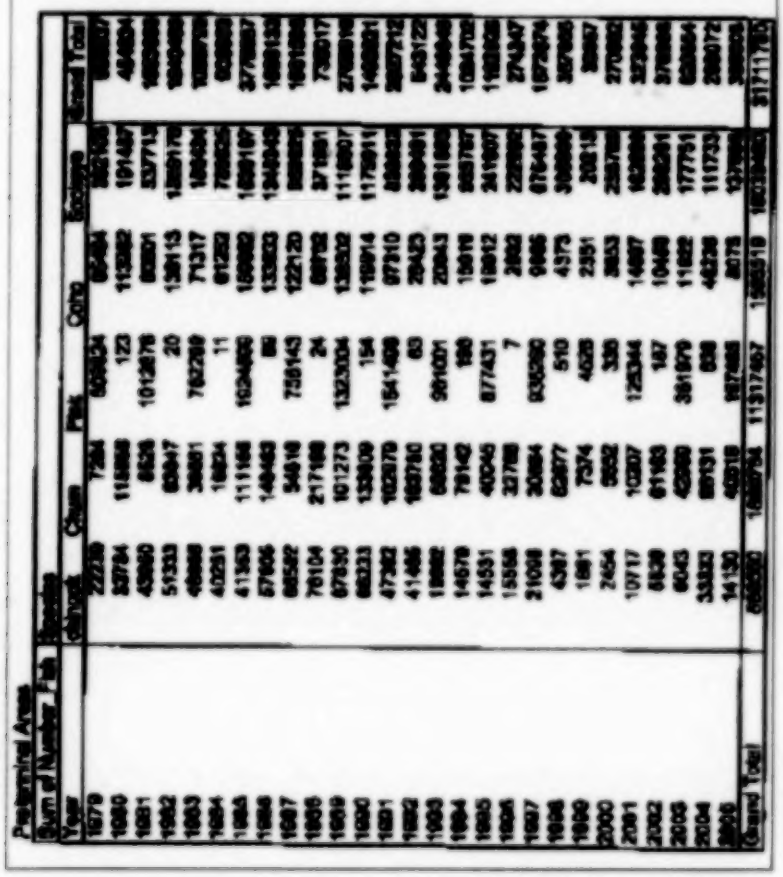
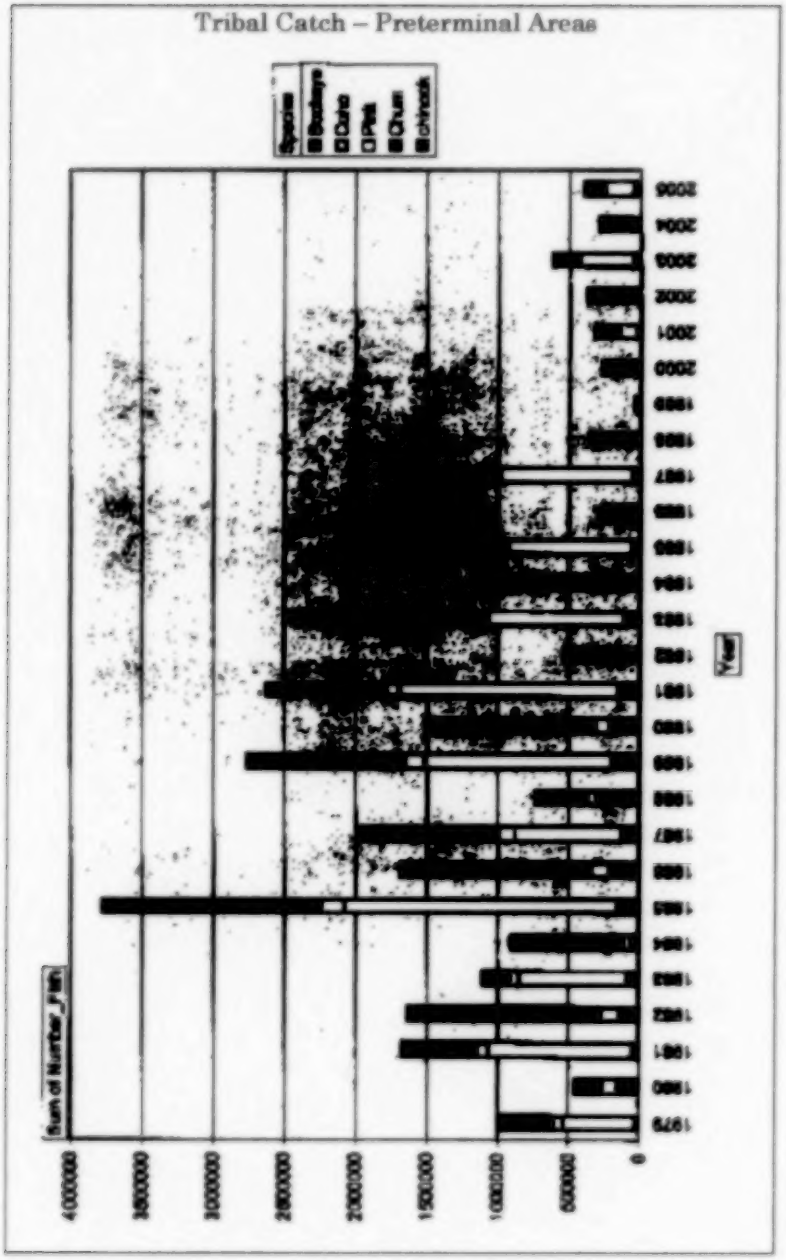
2004

Table 2. Treat catch in Preterminal (Areas 4B, 5, 6, 6C, 7, 7A, 9). Data from NWIFC TFT database 5/2/06.




Tribal Catch – Preterminal Areas
Species
Sockeye
Coho
Pink
Chum
Chinook
Sum of Number_Fish
Year
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
2006
2004
2003
2002
2001
2000
1999
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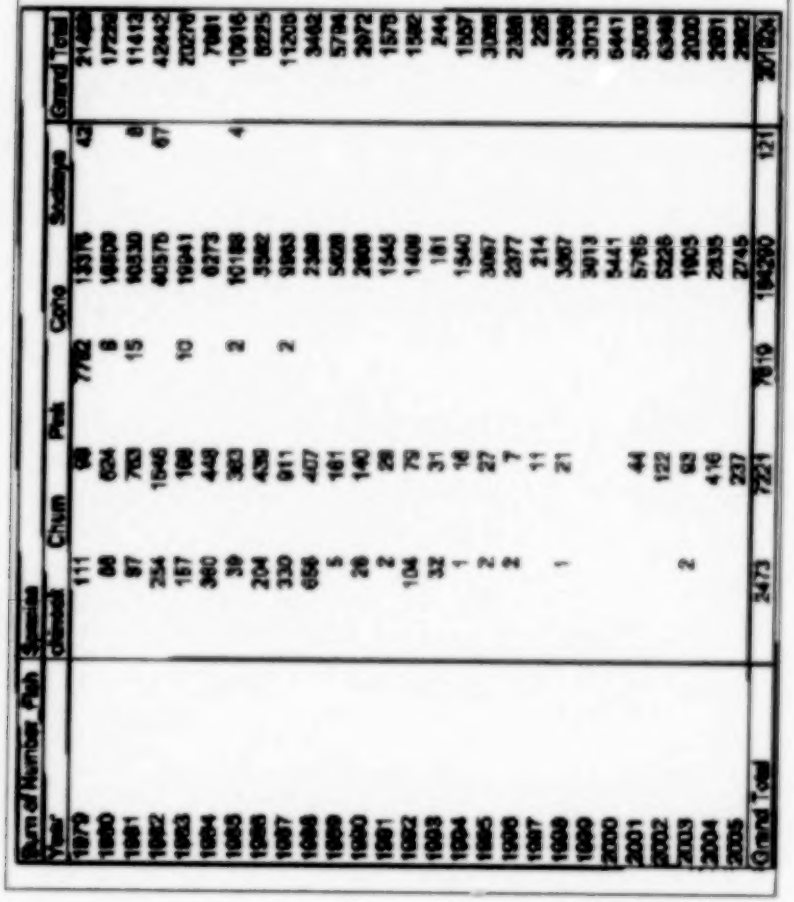
1980
1979

Table 3. Treaty catch in Strait of Juan de Fuca Terminal Areas (Areas 6B, 6D, 74B, 75A, 75C, 75E, 76A, 76B). Data from NWIFC TFT database 5/2/06.



Sum of Number_Fish	Species					
Year	chinook	Chum	Pink	Coho	Sockeye	Grand Total
1979	111	98	7782	13376	42	21469
1980	86	624	8	16509		17229
1981	97	763	15	10530	8	11413
1982	254	1546		40575	67	42442
1983	157	168	10	19941		20276
1984	360	448		6273		7081
1985	39	363	2	10188	4	10616
1986	204	439		5582		6225
1987	330	911	2	9963		11206
1988	656	407		2389		3462
1989	5	161		5628		5794
1990	26	140		2806		2972
1991	2	29		1545		1576
1992	104	79		1409		1592
1993	32	31		181		244
1994	1	16		1540		1557
1995	2	27		3067		3096
1996	2	7		2377		2386
1997		11		214		225
1998	1	21		3567		3589
1999				3013		3013
2000				5441		5441
2001		44		5765		5809
2002		122		5226		5348
2003	2	93		1905		2000
2004		416		2535		2951
2005		237		2745		2982
Grand Total	2473	7221	7819	184290	121	201924

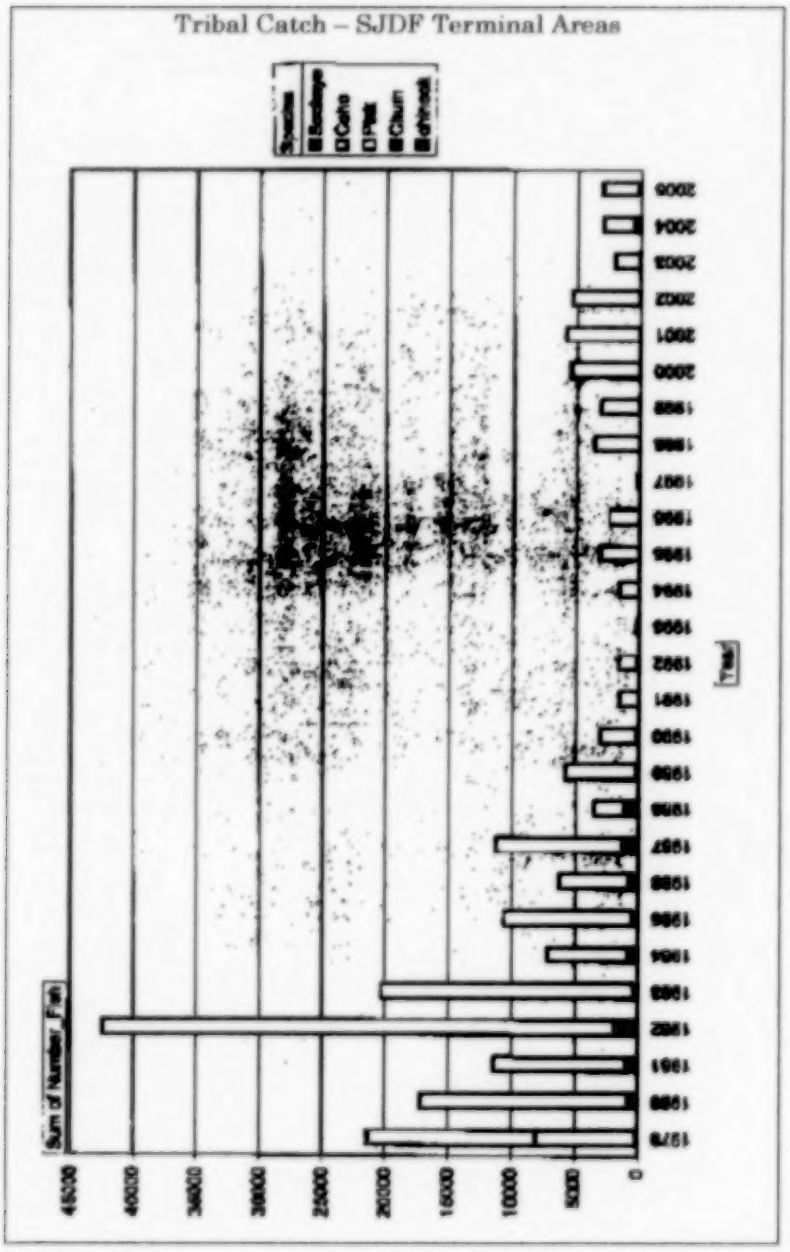

Tribal Catch – SJDF Terminal Areas
Species
Sockeye
Coho
Pink
Chum
Chinook
Sum of Number_Fish
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Year
2005
2004
2003
2002
2001
2000
1999
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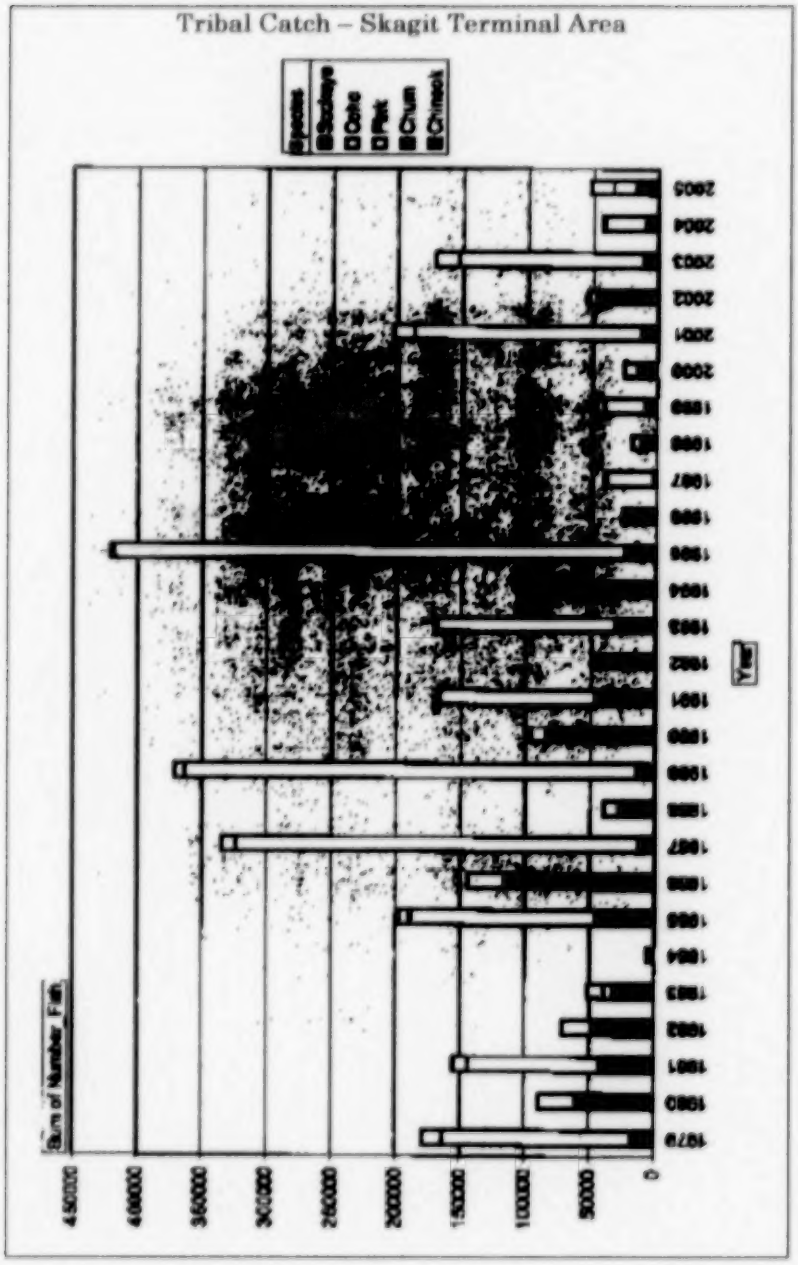
Table 4. Treaty catch in Skagit Terminal Areas (Areas 8, 78C, 78D, Baker R.). Data from NWIFC TFT database 5/2/06.

Sum of Number Fish	Species						
Year	Chinook	Chum	Pink	Coho	Sockeye	Steelhead	Grand Total
1979	8881	11768	145328	16088	510	1	176572
1980	8166	5042	10	28880	49		8187
1981	10234	31162	101632	12820	175		155523
1982	11477	38814		22227	288		70804
1983	6163	29084	6244	12619	171	17	61231
1984	1759	870		1832			4460
1985	5853	36133	144297	7776	22		107083
1986	3451	111304		28585	33		143453
1987	3233	8548	311788	6806	418		330886
1988	2988	25243		11578	61		39875
1989	5011	7606	346661	7286	61		370178
1990	1667	83457	1	11735	27		96887
1991	2480	43403	120371	2760	186		168800
1992	1085	43547		3504	14		48220
1993	994	29088	138691	810	256		169849
1994	61	102002		710	67		102886
1995	2791	20877	383786	2759	37		420882
1996	49	25521		458			26028
1997	875	1135	36745	949	51		38855
1998	82	11038	1	8257	108		19486
1999	28	8597	31019	5719			45863
2000	53	14888	2	11148	9		25211
2001	37	12434	174884	15818	32		203675
2002		4808		7857			83888
2003	44	10724	142133	17768			170867
2004	20	6653		22838	1845		42357
2005	1740	14000	17787	17900	144		52201
Grand Total	76668	634008	2114282	300182	4800		3327882


Tribal Catch – Skagit Terminal Area
Species
Sockeye
Coho
Pink
Chum
Chinook
Sum of Number Fish
Year
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
2005
2004
2003
2002
2001
2000
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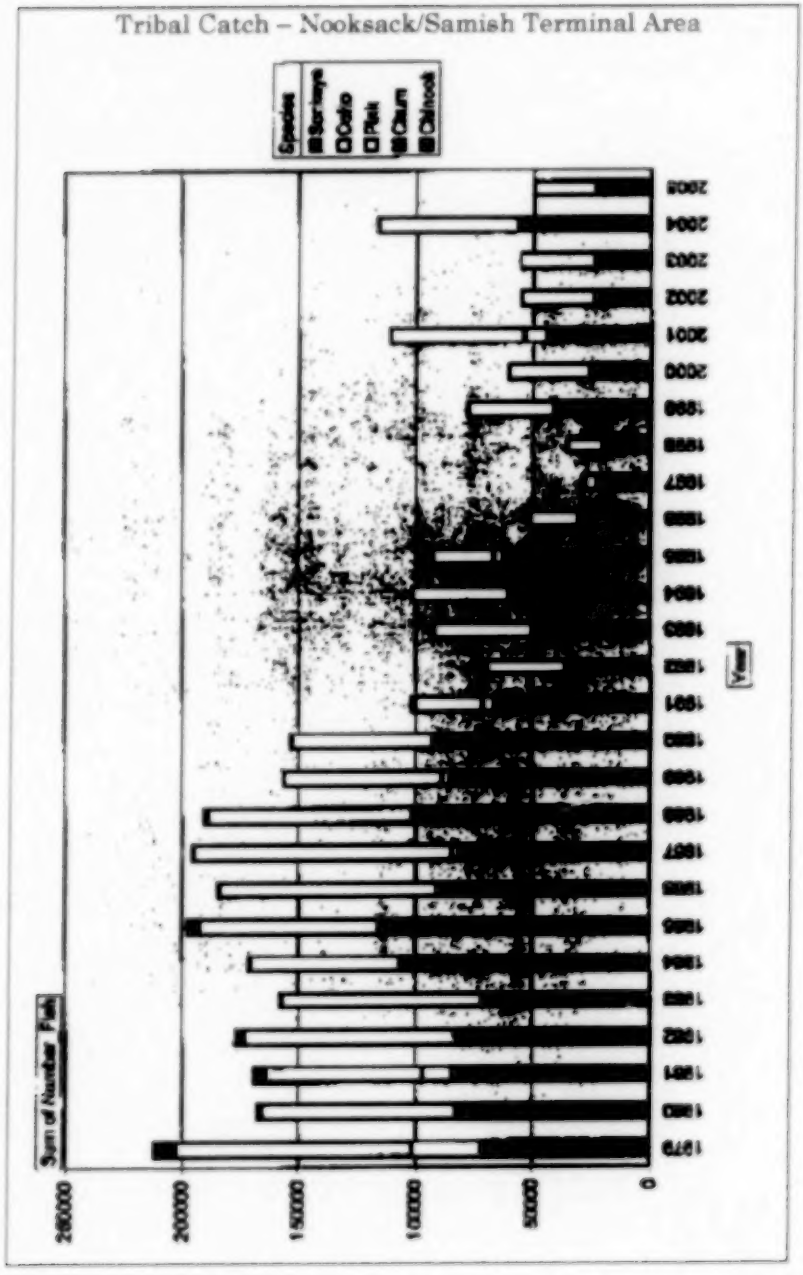
1979

Table 5. Treaty catch in Nooksack/Samish Terminal Areas (Areas 7B, 7C, 7D, 7E, 83D, 83F). Data from NWIFC TFT database 5/2/06.

Sum of Number_Fish	Species					
Year	Chinook	Chum	Pink	Coho	Sockeye	Grand Total
1975	46460	26620	26684	100339	8880	212887
1980	63968	16390	12	82858	2433	167665
1981	43969	40763	12678	89885	5015	192620
1982	37310	45653		80465	3950	176888
1983	30887	38229	2210	85005	741	157572
1984	58897	48868	5	63388	819	170817
1985	86828	57212	1785	76530	5747	188112
1986	37108	59434	3	82771	1120	184436
1987	28068	54683	2917	110484	488	196641
1988	28661	72804	2	87018	1459	190032
1989	22617	82185	3679	87087	257	196035
1990	45261	47915	5	58047	930	163948
1991	18821	47828	4978	28888	1728	101774
1992	10549	26288	6	29573	333	66808
1993	16135	32781	625	42764	187	92802
1994	18783	41497	3	41061	31	101575
1995	19913	43884	3606	26516	46	93745
1996	17254	13038		21139	9	51434
1997	15773	8260	518	6000	734	29882
1998	15382	4772		15085	4	36224
1999	33489	6132	1434	35705	10	77827
2000	21605	4111		34171	7	60094
2001	37885	6639	9307	57177		111208
2002	22833	1425		30729	245	55232
2003	18873	5716	1264	31764	74	58820
2004	12738	44085		88640	53	145534
2005	13948	873	339	23883	67	40370
Grand Total	765414	658216	76118	1473480	36109	3231336


Tribal Catch – Nooksack/Samish Terminal Area
Species
Sockeye
Coho
Pink
Chum
Chinook
Sum of Number Fish
250000
200000
150000
100000
50000
0
Year
2005
2004
2003
2002
2001
2000
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1979

Table 6. Treaty catch in Stillaguamish/Snohomish Terminal Areas (Areas 8A, 8D, 78G, 78F). Data from NWIFC TFT database 5/2/06.

Sum of Number Fish	Species					
Year	Chinook	Chum	Pink	Coho	Sockeye	Grand Total
1979	11257	2421	26608	37489	101	78778
1980	20832	23624	4	117991	206	162457
1981	16167	25054	33284	71164	41	145580
1982	10914	43974	12	36625	139	93684
1983	12288	10352	25331	36909	56	86996
1984	8740	24818		23746	1	58405
1985	8722	50478	92510	70692	4	222406
1986	11682	49467		89140		150289
1987	4026	78519	21199	119434	7	223184
1988	7988	153085	17	78954	26	240028
1989	9282	62348	112417	86801	204	270849
1990	9106	68222	80	94116	5	172529
1991	5614	63999	34760	67924	17	172314
1992	3886	74954	21	75714	1	154575
1993	4013	103047	9633	31462		148155
1994	4641	114118		78653		197413
1995	8702	33588	52344	46986	33	141660
1996	11327	42706	43	30228		84302
1997	8302	5716	34178	24917	15	73128
1998	7088	63374		23586		94008
1999	14441	25552	12027	17843	95	69958
2000	8047	13928		85445		105418
2001	3905	8240	3354	69966		75465
2002	1975	6694		48573		57242
2003	7030	35193	7231	8322		57776
2004	4440	70811		79118	364	154731
2005	6687	24160	21017	35472	171	87547
Grand Total	229737	1279416	487950	1581255	1486	3579844

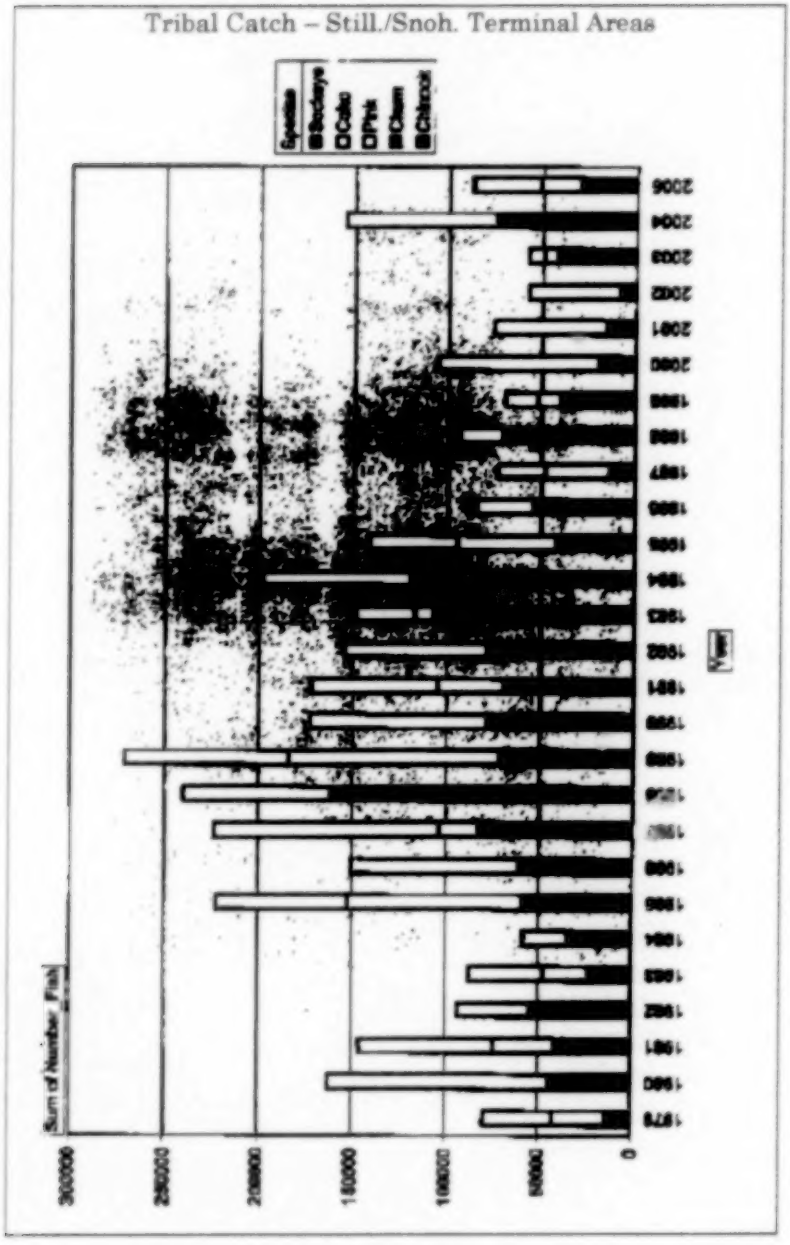

Tribal Catch – Still./Snoh. Terminal Areas
Sockeye
Coho
Pink
Chum
Chinook
Sum of Number_Fish
300000
250000
200000
150000
100000
50000
0
2006
2004
2003
2002
2001
2000
1999
1998
1997
1996
1995
1994
1993
1992
1991
1990
1989
1988
1987
1986
1985
1984
1983
1982
1981
1980
1979

Table 7. Treaty catch in South Sound Terminal Areas (Areas 10, 10A-G, 11, 11A, 13, 13B, 13C, 13D-K, 8OA, 80B, 8OC, 81A, 81B, 81C, 83A, 83B, 83C, 83D, 83E, 83F, 83H). Data from NWIFC TFT database 5/2/06.

Sum of Number Fish	Species						
Year	Chinook	Chum	Pink	Coho	Sockeye		Grand Total
1979	28647	31518	22127	258448	2882		383443
1980	31611	1016539	0	334330	68888		646877
1981	26147	102284	8501	176835	1607		315884
1982	21701	126218		328816	14484		491220
1983	45251	88003	5178	288300	31730		458762
1984	40484	128005	14	270482	57823		497808
1985	38616	109088	3700	331888	4105		488229
1986	23042	97608		417668	9814		548723
1987	40082	162863	4873	644888	11760		864467
1988	49877	169446	7	477985	128420		845808
1989	51016	110885	22531	288811	1739		482751
1990	64088	131876	3	323457	3870		522004
1991	30949	95779	2335	164478	302		293832
1992	31508	141078	1	128832	293		301712
1993	24457	101708	1312	61885	88		189628
1994	31986	112008		255438	6		399432
1995	33702	78422	4053	154881			271158
1996	20669	47690		65872	57016		194456
1997	12107	13472	88	76722	19		102408
1998	15067	35382		58228			108677
1999	21038	18807	64	17830	11		53258
2000	16864	40695		188883	52529		298971
2001	21588	137882	588	149840	2497		312395
2002	18429	88275	84	118800	28888		233302
2003	15388	104018	2851	115817			237884
2004	26888	223331		218126	17524		485870
2005	28023	81720	1780	137082			257484
Grand Total	676581	2744884	80140	5883834	438219		10008764

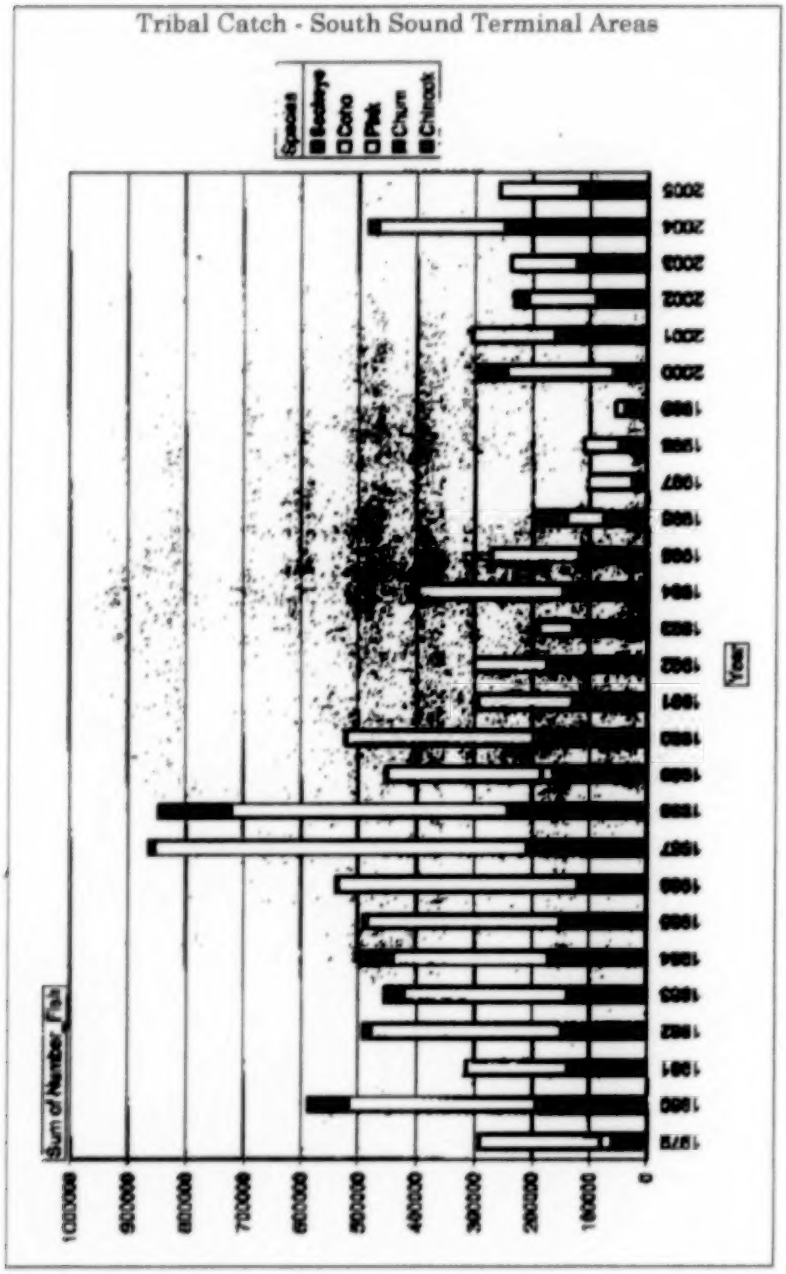
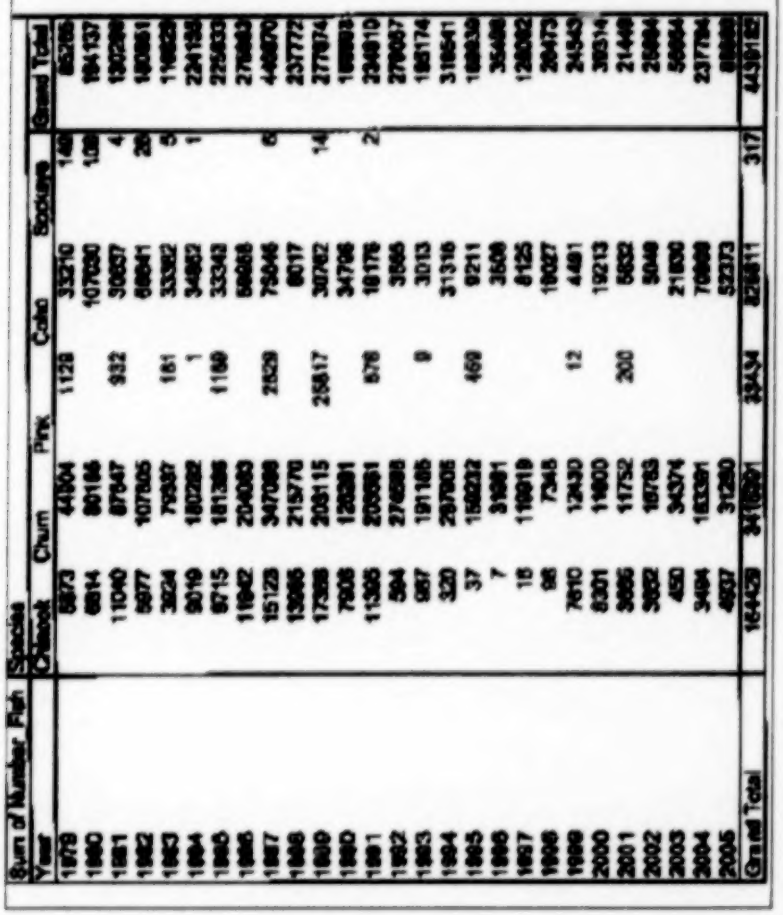

Tribal Catch - South Sound Terminal Areas
Species
Sockeye
Coho
Pink
Chum
Chinook
Sum of Number_Fish
Year
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
2005
2004
2003
2002
2001
2000
1999
1998
1997
1996
1995
1994
1993
1992
1991
1990
1989
1988
1987
1986
1985
1984
1983
1982
1981
1980
1979

Table 8. Treaty catch in Hood Canal Terminal Areas (Areas 12, 12A, 12B, 12C, 12C, 12D, 82A-J.) Data from NWIFC TFT database 5/2/06.



Sum of Number_Fish	Species					
Year	Chinook	Chum	Pink	Coho	Sockeye	Grand Total
1979	5873	44904	1129	33210	149	85265
1980	6814	80166		107030	109	194137
1981	11040	87647	932	30637	4	130299
1982	5977	107805		66641	28	180851
1983	3924	79337	181	33382	5	116829
1984	9019	180282	1	34852	1	224155
1985	9715	181386	1169	33343		225633
1986	11942	204083		59958		276983
1987	15123	347088	2529	75646	6	440870
1988	13965	215770		8017		237772
1989	17368	203115	25817	30762	14	277674
1990	7908	126281		34796		168993
1991	11395	203561	578	18176	2	234810
1992	594	274598		3565		279057
1993	987	191165	9	3013		195174
1994	320	287905		31316		319541
1995	37	159232	459	9211		169939
1996	7	31981		3508		35496
1997	16	119919		8125		128062
1998	98	7348		19027		26473
1999	7610	12430	12	4491		24543
2000	8301	11800		19213		39314
2001	3666	11752	200	5832		21449
2002	3652	16783		5049		25684
2003	450	34374		21830		56654
2004	3494	163391		70909		237794
2005	4937	31280		52373		88589
Grand Total	164429	3416391	33434	826611	317	4439182

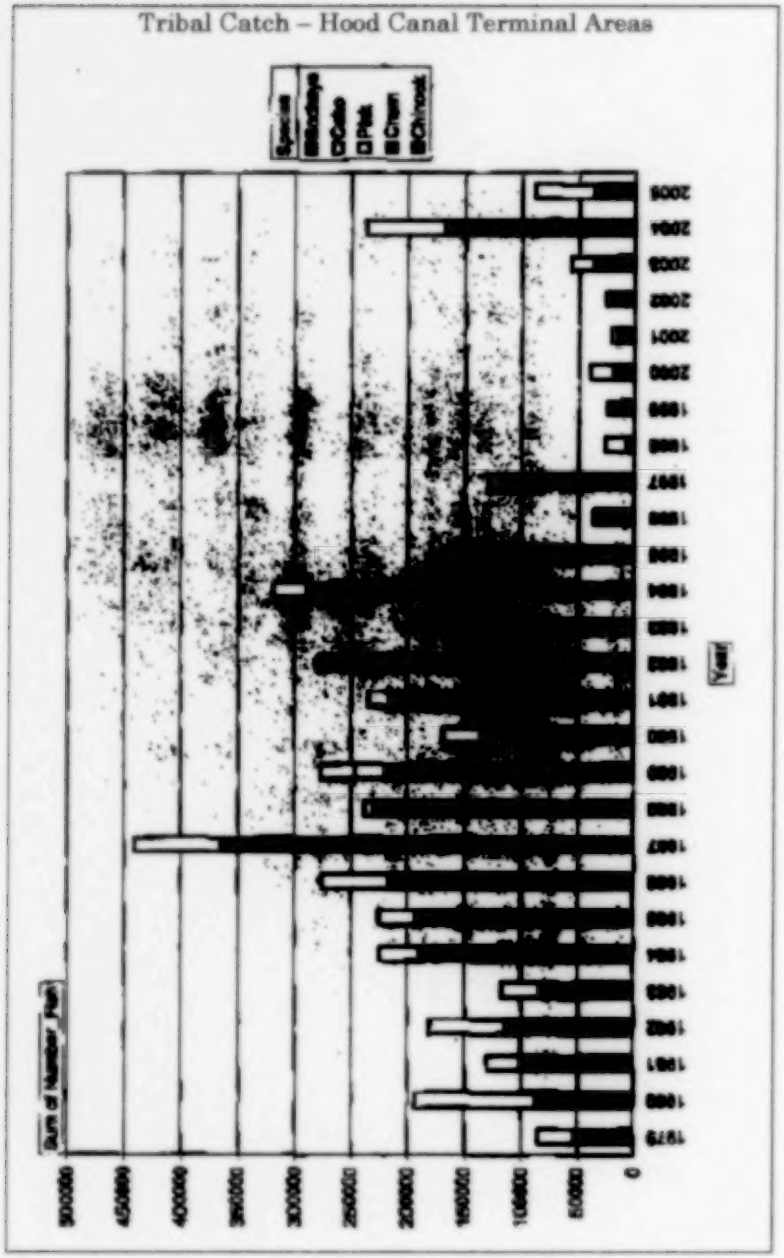

Tribal Catch – Hood Canal Terminal Areas
Sum of Number_Fish
Year

Table 9. Treaty catch of Sockeye in preterminal areas (4B, 5, 6, 6C, 7, 7A, 9) assumed to be primarily Fraser River origin and terminal area (10, 10A-G, 11, 11A, 13, 13B, 13C, etc.) assumed to be Lake Washington or other US origin stocks.

	CAN Origin (1)	US Origin (2)
1979	[illegible]	[illegible]
1980	181,487	[illegible]
1981	697,719	1,957
1982	[illegible]	14,494
1983	[illegible]	91,730
1984	[illegible]	[illegible]
1985	[illegible]	4,169
1986	[illegible]	5,614
1987	[illegible]	11,730
1988	371,981	[illegible]
1989	[illegible]	1,739
1990	[illegible]	[illegible]
1991	[illegible]	[illegible]
1992	[illegible]	[illegible]
1993	[illegible]	[illegible]
1994	[illegible]	[illegible]
1995	941,897	
1996	[illegible]	57,015
1997	[illegible]	19
1998	[illegible]	
1999	[illegible]	11
2000	[illegible]	[illegible]
2001	[illegible]	[illegible]
2002	[illegible]	[illegible]
2003	177,781	
2004	[illegible]	[illegible]
2005	[illegible]	
[illegible]	[illegible]	[illegible]

(1) Stocks in this category are predominantly Fraser River stocks that are of Canadian origin. This category is know to include a small amount of inter-mingled US origin (Baker River, Lake Washington, Misc.) stocks but their numbers are considered minor in comparison.

(2) Stocks in this category are predominantly Lake Washington stocks that are of US origin. There are other minor US origin stocks that may not be accounted for in this table.

THE HONORABLE RICARDO MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, vs. STATE OF WASHINGTON, et al., Defendants	Case No.: C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF RONALD McFARLANE IN SUPPORT OF PLAINTIFF-TRIBES' MOTION FOR SUMMARY JUDGMENT

I, Ronald McFarlane, hereby declare as follows:

1. I am over the age of eighteen, a United States citizen, and am competent to testify as to the matters here set forth. I make this affidavit on the basis of my personal knowledge, skill, experience, training, education, review of the State's culvert databases. This affidavit is made by me for the purpose explaining how I derived the following information related to state-owned culverts as part of United States v. Washington, 01-1 (Culverts).

2. For the past 8 years (1998-Present). I have been the Geographic Information System (GIS) Technician for the Northwest Indian Fisheries Commission. I have also been a GIS instructor at the Grays Harbor College for 6 years (2000-2005), teaching Introduction to GIS, Cartography, ARCINFO, Arcview, GIS Special Topics, and GIS Work Co-op.

3. My education includes an Associate in Applied Science in GIS from Grays Harbor College. My degree

included classes in programming languages for ARCINFO and ARCVIEW, GIS theory, cartography, Microsoft Access, and wildlife management.

4. I was requested by counsel for Plaintiff Tribes in this sub-proceeding to examine certain State databases that contain information regarding the location and fish passage status of culverts owned by the State Departments of Transportation (WDOT), Fisheries and Wildlife (WDFW), Parks and Recreation (WDP), and Natural Resources (DNR). Specifically, I was asked, using my experience in to GIS, to apply standard GIS protocols to data in the databases to determine the numbers of fish-blocking State culverts within the *United States v. Washington* "Case Area."

5. I utilized the following state-managed databases to generate the information related to state-owned culverts: Shapefile format, dated 3/27/06 (culverts.shp) for WDFW/WDOT, Shapefile format, dated 5/10/06 (DNR_Culverts.shp) a separate Excel spreadsheet supplied listing 152 repaired WDNR culverts in the ease area, ("Copy of DNR update of culverts for 1st 2nd set(2)", a separate database table listing WDOT culvert repairs (WSDOT_FX.dbf), dated 3/27/06 and a separate Excel spreadsheet for WDP, dated 7/10/06 (culvert info-all.xls). All spatial data was projected to the same projection coordinate system prior to analysis.

6. All of the data used in generating my conclusions was provided to me by John Sledd, attorney for various plaintiff-tribes. To the best of my knowledge, all of my conclusions are based on the State's databases and information provided by the State as part of this court case.

7. All of the data analysis I used are standard protocols used by GIS professionals, as described below in paragraphs l l, 12, and 13; however, due to a lack of some information (primarily metadata), I made so-me assumptions based on my experience, which are discussed below in paragraphs l l(f), 12(f), and 13(e):

8. **WDFW /WDOT Conclusions.**

After performing the data analysis described below on the WDFW/WDOT culvert data, I conclude from that data that there are 3,340 WDFW/WDOT culverts in the case area. 1,113 culverts are identified as barriers with fish present. Of the 1,113 fish barrier culverts, 806 are classified as "Repair Required," 237 as "Limited Gain," 67 as "Undefined," and 3 are not defined. 49 culverts in 43 sites are classified as "fixed." Of the 1,113 fish barrier culverts, none appear to be duplicates of the WDP culvert dataset and 7 of the culverts could be duplicates of the DNR culvert dataset.

9. **WDNR Conclusions**

After performing the data analysis described below on the DNR culvert data, I conclude from that data that there are 5,302 DNR culverts in the case area. 665 of the 5,302 WDNR culverts are marked with identifiers that show the streams are used by fish and that the culverts are barriers. Although the main dataset for WDNR did not have a field for "repaired," a separate WDNR spreadsheet was supplied by John Sledd showing 152 repaired WDNR culverts. Of these, only 82 culverts readily matched the main WDNR dataset. 26 of these 82 culverts are marked as in fish bearing streams and 13 are still shown as barriers, despite their presence in the repair spreadsheet Of the 665 fish barrier culverts, none appear to be duplicates of

the WDP culvert dataset and 7 of the culverts could be duplicates of the WDFW/WDOT culvert dataset.

10. **WDP Conclusions**

After performing the data analysis described below on the WDP culvert data. I conclude from that data that there are 436 WDP culverts in the case area. 85 of the 436 WDP culverts in the case area are marked with identifiers that show they are used by fish and that they are barriers. None of the 436 WDP culverts are marked as repaired. None of these culverts appear to be duplicates of the WDNR culvert database or of the WDFW/WDOT culvert database.

11. **WDFW/WDOT Analysis Performed**

(a) I received the main and supplemental WDFW/WDOT data from John Sledd in Shapefile format, dated 3/27/06 (culverts.shp).

(b) I converted the data to Coverage format.

(c) I clipped the data to the case area, Washington Water Resource Inventory Areas (WRIAs) I-23.

(d) I Snapped the culvert points to DNR 1:24000 scale stream layer (March 06) at a distance of 80 feet (based upon the scale accuracy of +/-40 feet for the hydrography data).

(e) I generated a count of records matching the data breakout.

(f) Note: Metadata was provided, dated August 2005.

(i) Scale accuracy of the data is +/-100 feet per the metadata.

(ii) Fish use was determined by the records (Fish use value of "Yes"), not by checking against a spatial dataset of fish distribution.

(iii) Barrier status was determined by the records (barrier field value of "Yes").

(g) WDOT Repaired List (WSDOT_FX.dbf, dated 3/27/06)

(i) 132 repairs statewide

(ii) 64 match site ids for the WDFW/WDOT culvert database for the case area. The breakout is as follows:

1) 3 do not have fish presence

2) 2 have unknown fish presence

3) Of the 59 remaining:

a. 4 are defined as "Require Repair." Note all 4 of these show a repair year of 2005 - It is unclear whether they have been fixed and are not yet in the database, the: repairs were inadequate, or some other possibility.

b. 1 is defined as "Limited Gain."

c. 2 are defined as "Undefined"

d. 9 are defined as "OK"

e. 43 are defined as "Fixed"

(h) 28 match site ids for the WDFW/WDOT fish way database for the case area. All are defined as barrier - "No".

12. **WDNR Analysis Performed**

(a) I received the main and supplemental DNR data from attorney John Sledd in a Shapefile format, dated 5/10/06 (DNR_Culverts.shp).

(b) I converted the data to Coverage format.

(c) I clipped the data to the case area (WRIAs 1-23).

(d) ! Snapped the culvert points to DNR I :24000 scale stream layer (March 06) at a distance of 80 feet (based upon the scale accuracy of +/-40 feet for the hydrography data).

(e) I generated a count of records matching the data breakout.

(f) Note: Metadata was provided, dated September 2002.

(i) Scale accuracy of the data is +/-40 feet per the metadata.

(ii) Fish use was determined by the records provided in the database (anadflg or resflg value of 1), not by checking against a spatial dataset offish distribution.

(iii) Barrier status was determined by the records provided in the database (barrier field value of 20 or 30).

13. **WOP Analysis Performed**

(a) I received the Parks data from attorney John Sledd in an Excel spreadsheet format, dated 7/10/06 (culvert info-all.xis).

(b) I converted it to Access database format, extracted the culvert records, and then separated the

data into those records with specific spatial locations and those with general locations.

(c) For the records with specified locations:

(i) I converted the data to ESRI coverage format. ESRI is Environmental Systems Research Institute, Inc. ("ESRI")

(ii) I projected the data to the State-plane coordinate system.

(iii) I clipped the data points to Water Resource Inventory (WRIAs) 1-23, which essentially corresponds to the case area.

(iv) I snapped the culvert points to DNR 1:24000 scale stream layer (March 06) at a distance of 80 feet (based upon the scale accuracy of +/-40 feet for the hydrographic data).

(v) I generated a count of records matching the data breakout.

(d) For the records without specific locations:

(i) A manual check was performed to determine if the specified park was in the case area or not.

(ii) For those records that fell within the case area, I generated a count of records matching the data breakout.

(e) Note: as metadata was not provided with the data set several assumptions were made.

- The spatial coordinate systems for the records with specific locations were assumed to be using the North American datum of 1927. This is ESRIs default datum for the Geographic Coordinate System when a datum is not

specified. The WGS84 datum could have been used if I knew the data was collected using a GPS Unit with the default datum, but without metadata about collection. I just let the program decide the default datum.

- Fish use was determined by the records, not by checking against a spatial dataset of fish distribution.
- Barrier status was determined by the records provided in the spreadsheet.
- Other fields were difficult to use without more information (i.e., what does a repair status of "ok" mean for a record where barrier is "Yes"?)
- Scale accuracy of the data. is not identified.

14. Pursuant to 28 U.S.C. § 1746. I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed this *13th* day of August 2006, at *Oakville*, Washington.

s/Ronald L. McFarlane
Ronald McFarlane

The Honorable Ricardo Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213M Subproceeding No. 01-1 (CULVERTS) DECLARATION OF LOU BAKER

I, Lou Baker, declare as follows:

1. I am the Roadway Operations Supervisor for the Washington State Department of Transportation ("WSDOT"). I have held this position or its equivalent for four years and I have worked for the WSDOT as a Transportation Planning Specialist for a total of eight years. In all, I have worked for WSDOT since 1989. My duties include updating and distributing the State Highway Log Planning Report, updating the Roadway Classification Log, Horizontal and Vertical alignment Report and Road Life (Contract History) Report. I also supervise field and office personnel. The statements in this declaration are based on my personal knowledge.

2. A centerline line measures the length of a highway and does not take into consideration

the number of lanes. A one-mile length of four lanes measures the same as one-mile length of two lanes, etc. Both equal one centerline mile. A centerline mile is a linear measure of a State Route in 1/100th mile increments.

3. I have worked for 13 years updating the State Highway Log through contracts and field checks. The State Highway Log is a report which lists all State Routes from beginning to end in 1/100th mile increments and includes features on and along the route (number of lanes, roadway width, intersections, structures, traffic control, illumination, speed limit, special use lanes for example). A field check is physically inventorying a State Route, or section thereof, by driving the route in a vehicle equipped with a distance Measuring Instrument (DMI). A DMI is a highly calibrated odometer which is linked through a sensor to the transmission, which sends pulses to the DMI and the DMI reads out the mileage to 1/1000th of a mile (11100th for WSDOT purposes). Contracts give lengths in engineering stations, which are 100 feet. I calculate the number of stations in the contract area and then convert the length in feet to length in miles.

4. The following is a table containing the centerline miles of state highways from 1974 to present. Each year on the table is representative of the year on the State Highway Log cover, which until this year's publication (2005B) contained the totals of the prior year (i.e., 2003 Highway Log represented data thru 12/31/2002).

Year	Centerline Miles
1974	6912
1975	6906
1976	6916
1977	Unavailable
1978	6920
1979	6919
1980	6888
1981	6888
1982	6888
1983	6941
1984	6960
1985	6972
1986	6973
1987-89	Unavailable
1990	6996
1991(Pre RJT)	6998

Year	Centerline Miles
1991(Post RJT)	7012
1992	7020
1993	7048
1994	7047
1995	7052
1996	7053
1997	7059
1998	7066
1999	7063
2000	7061
2001	7061
2002	7063
2003	7063
2004	7049
2005	7046
2005B	7046

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 1st day of September 2006.

s/Lou Baker
LOU BAKER

THE HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, vs. STATE OF WASHINGTON, at al., Defendants.	Case No.: C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF JOHN C. SLEDD IN SUPPORT OF PLAINTIFF-TRIBES' REPLY TO STATE OPPOSITION TO TRIBES' MOTION FOR SUMMARY JUDGMENT

I, John C. Sledd, hereby declare as follows:

1. I am an attorney and of counsel to the law firm of Kanji & Katzen, PLLC. I represent the undersigned Plaintiff-Intervenor tribes in this sub-proceeding. I make this declaration in that capacity.

2. Attached to this declaration at pages 3 through 13 are true and correct copies of selected pages of the Plaintiff-Intervenor Tribes' Answers and Responses to Washington's Third Discovery Requests in this Sub-proceeding.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed this 11th day of October, 2006, at Seattle, Washington.

s/ JOHN C. SLEDD
John C. Sledd, WSBA # 19270

[original page 1]

HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, v. STATE OF WASHINGTON, et al. Defendants.	Civil No. C70-9213 Sub-Proceeding No. 01-01 (Culverts) PLAINTIFF-INTERVENOR TRIBES' ANSWERS AND RESPONSES TO WASHINGTON'S THIRD DISCOVERY REQUESTS

TO: STATE OF WASHINGTON, Defendant

AND TO: FRONDA WOODS, Attorney of Record for Defendant

AND TO: STEVE E. DIETRICH, Attorney of Record for Defendant

AND TO: PHILIP M. FERESTER, Attorney of Record for Defendant

COME NOW, the Plaintiff-Intervenor Tribes, and answer and respond to Defendant State of Washington's Third discovery requests pursuant to Fed. R. Civ. P. 26, 29, 33 and 34, the corresponding Local Civil Rules for the United States District Court - Western District of Washington ("LCR"), and the proposed Scheduling Order for this subproceeding.

[original page 12]

NISQUALLY: No, not to the best of our knowledge. This answer applies to the

Nisqually Tribe's portion of the case area only.

PORT GAMBLE S'KLALLAM: Yes

JAMESTOWN S'KLALLAM: Several state-owned culverts and one state-owned dam have been identified to impact salmonid runs.

LOWER ELWHA KLALLAM: Culverts on all ownerships (federal, state, county, municipal and private) are a significant factor limiting salmon production within the Lower Elwha Tribes usual and accustomed area. Culverts generally do not result in outright fish kills, rather when they are blockages they act to reduce the overall freshwater productive capacity of some watersheds.

SAUK-SUIATTLE: No additional information beyond that provided by Skagit River System Cooperative.

NOOKSACK:

HOH: Yes.

MAKAH: Yes

SQUAXIN ISLAND:

SKOKOMISH:

QUINAULT:

YAKAMA:

INTERROGATORY NO. 82: If your answer to Interrogatory No. 81 is yes, please identify the

particular state-owned culvert or culverts and run involved, describe the nature of

[original page 13]

the destruction or threatened destruction, and please explain why you believe the culvert or culverts to be state-owned.

ANSWER: In addition to the tribe-specific responses provided below, we assume all culverts identified as state-owned barriers to fish passage by the WSDOT, WDFW, and WDNR in their respective ongoing culvert inventories are indeed state-owned and block fish passage and, therefore, threaten any fish runs whose waters of origin are located upstream from the culvert barrier, which attempts to migrate through any such culvert, or whose habitat is affected by any such culvert.

NWIFC:

SKAGIT RIVER SYSTEM COOPERATIVE:

POINT NO POINT TREATY COUNCIL: Not applicable.

LUMMI:

PUYALLUP: See response to Interrogatory No. 81. Again, the culvert under HWY SR 162, and all the other culverts running under SR highways, affects all runs of fish. The nature of the destruction or threatened destruction is blockage of fish passage. The culverts are state-owned because they run under SR's. (Note that the SR 99 culvert was fixed two years ago.)

SWINOMISH:

UPPER SKAGIT:

SUQUAMISH: SR 305 just southwest of Suquamish Way (WRIA 150296, fall chum & coho), SR 305 just northwest of Lemolo/Totten intersection (WRIA 150293, fall chum & coho), SR 305 between Delate Road and Stenbom Lane (WRIA 150291, fall chum & coho),

[original page 17]

addition to these structures, bridges and box culverts on Morse Creek, Bear Creek, and an unnamed tributary to the Pysht River are undersized resulting in habitat degradation. On lands owned by Washington DNR known blocking culverts have been identified on forest lands in the Twin River, Clallam River, and Salt Creek watersheds.

SAUK-SUIATTLE: No additional information beyond that provided by Skagit River System Cooperative.

NOOKSACK:

HOH: Lost Creek Box Culvert (WRIA # 20.0440) under Highway 101 which existed as a concrete box culvert from about 1931 to 1999. In 1999 the culvert was replaced by a bridge that restored coho and steelhead access to above the highway.

MAKAH: Brownes Creek, a tributary to the Hoko River (Straits of Juan de Fuca), was severely impacted during winter 1999 by a debris flow and subsequent culvert failure at a lower State road crossing. Floodwater and debris from upstream (Crown Pacific Land) clogged a State Owned (DNR) culvert on the 5000 Road on DNR property. The culvert was located under 45 to 50 feet of fill and was

approximately 7 feet in diameter. No additional water relief culverts were present within the deep fill. Stream gradient along this section of Brownes Creek varies between 4 and 20%. The culvert was undersized to pass the 100-year flow, sediment, and wood transport, but was especially undersized to pass debris flow material in a landslide prone area within commercial tree farms.

[original page 18]

After the culvert plugged during the storm event, the area behind the culvert filled with water, sediment and debris to an approximate volume of 500,000 ft^3. Initially, this pounded water behind the blocked culvert and fill dam began pour over the 45-50 foot fill surface like a waterfall. However, soon after, the culvert and road fill failed, similar to a dam break event, sending a wall of water scouring downstream. The water height of this event decreased downstream from an initial height of 40 feet to 10 to 15 feet at the confluence of Brownes Creek with the Hoko River.

This debris flow significantly affected local fish populations in both Brownes Creek and the Hoko River. Brownes Creek contains runs of Chinook and Coho Salmon and Steelhead and Cutthroat Trout. The Hoko River additionally contains runs of Chum Salmon. Both Chinook and Chum salmon in the Hoko River Watersheds are "depressed" at low levels. Most if not all salmonids present in Brownes Creek during the culvert failure were killed, inducing adults, juveniles, and eggs. Dead fish were visible. Due to the dramatic changes in channel configuration, channel instability, fine sediment deposition, wood load, and

overall habitat integrity, Brownes Creek and the area downstream along the Hoko River have struggled to produce healthy numbers of salmon post-impact. This situation continues to this day, but recovery is occurring slowly.

The State of Washington and DNR provided no initial help or responsibility for mitigating this severe impact on fish habitat. The culvert crossing was never replaced, but some of the remaining culvert fill was pulled back out of the stream crossing. Inactions by other stakeholders to mitigate the impacts or restore the channel, lead the Makah Tribe to

[original page 19]

search for funding to restore this important public and Tribal resource, Brownes Creek. Using both Federal and State (SRFB) salmon funding and subsequent cooperation effort from Crown Pacific, the Makah Tribe initiated a rehabilitation project during Summer 2003. See question 132.

SQUAXIN ISLAND:

SKOKOMISH:

QUINAULT:

YAKAMA:

REQUEST FOR PRODUCTION NO. 46: If your answer to Interrogatory No. 81 is yes, please produce all documents supporting your contention.

ANSWER: Culvert inventories and accompanying culvert data developed by the WSDOT, WDFW, and WDNR are already in the State's possession.

NWIFC:

SKAGIT RIVER SYSTEM COOPERATIVE:

POINT NO POINT TREATY COUNCIL: We are unaware of any such documents.

LUMMI:

PUYALLUP: Please refer to previous responses. We have no other documentation at this time but will obtain photos and visual description of the SR 162 culvert when water levels and fish presence permit photographic depiction.

[original page 46]

obtain fish for ceremonial and subsistence needs, including the opportunity to obtain fish for these purposes from traditional sources or through traditional methods.

INTERROGATORY NO. 108: If your answer to Interrogatory No. 107 is yes, please identify the culvert or culvert, Tribe or Tribe, and ceremonial or subsistence fishery involved, and please explain why you believe the culvert or culverts to be state-owned.

ANSWER: N/A.

INTERROGATORY NO. 109: Do you have any evidence of actual fish killed at or as a result of a state-owned culvert? If the answer is yes, please identify the exact location of the fish kill, including stream, WRIA number, and river mile. Please explain why you believe the culvert to be a state-owned culvert.

ANSWER:

NWIFC:

SKAGIT RIVER SYSTEM COOPERATIVE: Yes we have evidence of fish kill. Red Cabin Creek at Highway 20, Tributary to the Skagit River in WRIA 3, river mile unknown, near the town of Hamilton. We believe the culvert is state owned because it is under State Highway 20.

POINT NO POINT TREATY COUNCIL: No.

LUMMI:

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PUYALLUP: No, not in the sense of physical evidence, post-mortem or necropsy documents, "smoking gun" photos, etc.

SWINOMISH: No additional information beyond that supplied by the Skagit River System Cooperative (formerly Skagit System Cooperative) in its responses to this Interrogatory.

UPPER SKAGIT:

SUQUAMISH: Yes. SR 305 just SW of Johnson Road crossing, WRIA 150290 (Bjorgen creek) RM 0.4 has been the scene of fish killed at a State-owned culvert. Dead chum and coho salmon have been observed at the downstream end of this culvert during annual spawner ground survey work conducted by Suquamish Fisheries staff.

STILLAGUAMISH:

NISQUALLY: No.

PORT GAMBLE S'KLALLAM: Yes. As a result of stream channel drying and isolation of juvenile coho from upstream perennial habitat in Marple Creek by a State-owned culvert, there has been direct mortality

of salmon. Please see the answer to Interrogatory No. 82. Marple Creek lies in WRIA 17, and the State Highway 101 crossing lies at 20 approximately RM 0.2. This event occurs each year that the stream dries below Highway 101. Often, when stream drying is not complete, piscivorous birds and raccoons will easily prey on juvenile coho isolated in individual pools by stream drying.

JAMESTOWN S'KLALLAM: No.

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LOWER ELWHA KLALLAM: Culverts do not generally result in fish kills, rather they limit the ability of fish to complete their life histories and may result in reductions in fish production within certain watersheds. The Brownes Creek culvert failure discussed in Interrogatory number 83 is an example of a catastrophic culvert failure.

SAUK-SUIATTLE: No additional information beyond that provided by Skagit River System Cooperative.

NOOKSACK:

HOH: No state owned culverts have been assessed by the state or Hoh Tribe as being the direct cause of debris flows killing fish or incubating eggs nor had we witnessed fish mortalities at the Lost Creek culvert perched outfall.

MAKAH: See # 82 above.

SQUAXIN ISLAND:

SKOKOMISH:

QUINAULT:

YAKAMA:

INTERROGATORY NO. 110: For each of the plaintiff-intervenor Tribes, please state, for each year from 1995 forward, the Tribal government's total dollar expenditures, including expenditures for business enterprises owned by the Tribe.

ANSWER: Objection. This Interrogatory is not reasonably calculated to discover relevant evidence and is vague, ambiguous, and overbroad. Many Tribal governmental

[original page 118]

ANSWERS AND RESPONSES dated this 27th day of May, 2005.

RAAS, JOHNSEN & STUEN, P.S.
OFFICE OF SPECIAL COUNSEL

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Tribal Coordinating Counsel

MORISSET SCHLOSSER AYER et al.

MASON D. MORISSET, WSBA #273
Counsel for the Tulalip Tribe
Tribal Coordinating Counsel

VERIFICATION

The undersigned, as Tribal Coordinating Counsel, and attorney for Plaintiff Tribe, Lummi Indian Nation, certifies to the best of his knowledge, information and belief, formed after a reasonable inquiry that the responses and objections are: (1) consistent with the Federal Rules of Civil Procedure and warranted by existing law or a good faith argument for the extension, modification or reversal of existing law; (2) not interposed for any improper purpose, such as to harass or to cause unnecessary delay or needless increase in the cost of litigation; and (3) not unreasonable or unduly burdensome or expensive, given the needs of the case, the discovery already in the case, the amount in controversy and the importance of the issues at stake in the litigation.

DATED this 27th day of May, 2005.

KANJI & KATZEN, PLLC

PHILLIP E. KATZEN, WSBA #7835
Co-Counsel for the Hoh, Suquamish, Jamestown, Lower Elwha, Pt. Gamble Bands of S'Klallams, Nisqually, Nooksack, Sauk-Suiattle, Skokomish, Squaxin Island, Stillagaumish, and Upper Skagit Tribes Tribal Coordinating Counsel

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The Honorable Ricardo Martinez

UNITED STATES DISTRICT COURT WESTERN DISTRICT OF WASHINGTON AT SEATTLE

UNITED STATES OF AMERICA, et.al. Plaintiff, vs. STATE OF WASHINGTON, Defendant	Case No.: C70-9213 M Subproceeding No. 01-1 (CULVERTS) STIPULATION RE: TREATY AND NON-TREATY HARVEST DATA

This Stipulation sets forth the parties' agreement regarding the use of three tables and fourteen figures for use as joint exhibits in this Subproceeding. This Joint Stipulation has been prepared, reviewed, and stipulated to by the parties for the sole purpose of presenting certain basic fisheries harvest data for use only in *United States v. Washington*, Case No. C70-9213 M, Subproceeding No. 01-1 (Culverts), U.S. District Court, Western District of Washington. Accordingly, these exhibits are limited to fisheries data available at the time of this sub-proceeding and are subject to revision.

TREATY HARVESTS 1974-2007 and TREATY/ NON-TREATY HARVESTS 1974-2003

Attached hereto and incorporated herein by this reference are true and correct copies of Tables 1-3 and Figures 1-14 summarizing Treaty and Non-Treaty harvest data. Table 1 summarizes tribal

harvest in each of the years 1974 through 2007 in the United States v. Washington case area (ocean, coastal rivers,[1] Puget Sound, and Puget Sound rivers combined), and in the Willapa Bay watershed. Tribal harvest data is listed separately for each species Chinook, Chum, Pink, Coho, Sockeye, and Steelhead). Table 1 also provides an all species total for each year. Figures 1-7 were also prepared to correspond to the data shown in Table 1. Table 2 and graphs corresponding to the data in that table (Figures 8-14) show combined treaty and non-treaty commercial and sport harvests for all salmonid species from 1974-2003. Table 3 provides treaty catch of US origin versus Canadian sockeye stocks in Puget Sound determined by applying an assumed percentage to total catch for each year. For Canadian origin stocks, the assumed percentage was determined by totaling the treaty sockeye landings in pre-terminal areas (4B, 5, 6, 6C, 7, 7A, and 9) and dividing by the total.

SOURCE OF DATA

Treaty and non-treaty commercial data in the attached Tables 1-3 were obtained from the Washington Department of Fish and Wildlife (WDFW) Commercial Licensing/Fish Ticket System (LIFT). The LIFT database is compiled by the

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[1] The *United States v. Washington* "case area" includes Washington watersheds that drain into Puget Sound, Grays Harbor, and the Pacific Ocean north of Grays Harbor. *United States v. Washington*, 384 F. Supp. 312, 328 (W.D. Wash. 1974); *United States v. Washington*, 459 F. Supp. 1020, 1097 (W.D. Wash. 1977). The Willapa Bay watershed is not within the case area.

WDFW in its regular course of business and is also maintained by the Quantitative Services Division of the Northwest Indian Fisheries Commission in its Treaty On-line Catch Accounting System (TOCAS). For the sport catch, the data was compiled from the WDFW Sport Catch database that is maintained by WDFW in its regular course of business. Information from the LIFT and Sport Catch databases is obtained routinely by state and tribal fisheries managers and scientists on an ongoing basis for fisheries management. The parties stipulate that the compilations contained in each of these tables and figures are true, accurate, and complete.

WDFW obtains the LIFT information from fish receiving tickets ("fish tickets"). The fish tickets used by both treaty and non-treaty fishers are used to record their catch in Washington State. Fish ticket contents for Treaty and non-Treaty fishers are defined by Ch. 220-69 of the Washington Administrative Code. The fish ticket must show the name or ID number of the fisher and fish buyer, date of landing, catch area, the individual number and total weight of each species caught, and other specific information. Treaty and non-Treaty fish ticket data are collected by WDFW and are routinely used by state, tribal, and federal regulators to manage fisheries. For example, fish ticket data are basic inputs for computer models used by state, tribal, and federal regulators to estimate the size of fish populations, to determine maximum allowable harvests, and to decide when any specific fishery must be closed to prevent over-harvest.

The Sport Catch database is derived from sport catch estimates provided by catch record cards, angler

surveys, and other methods of estimating sport catch in various locations and seasons throughout the state. This database is recognized by the State to be the best source of sport catch accounting that is currently available for the state of Washington and is routinely utilized by State, tribal, and federal fisheries managers and scientists.

Combined treaty and non-treaty sport and commercial harvest data of salmon and steelhead in the United States v. Washington Case Area and the Willapa Bay watershed include the following areas: Ocean, Coastal Rivers, Puget Sound and Puget Sound rivers from 1974-2003. Commercial catch includes ceremonial and subsistence catch but not test fisheries. Table 2, which includes sports catch, only goes to 2003 because 2004 and later sport catch estimates are considered preliminary by state fisheries managers and are subject to annual revisions.

The data and methods used in preparing the aforementioned tables and figures are what scientists would reasonably utilize and rely upon in fisheries management.

Signed this 24th day of September, 2009.

Presented by:

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THE UNITED STATES OF AMERICA

By: PETER C. MONSON
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CERTIFICATE OF SERVICE

I hereby certify that on September 24, 2009, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the parties required to be served in this subproceeding whose names appear on the official service list as registered in the Court CM/ECF system.

By: s/Samuel J. Stiltner
WSBA: # 7765

Table 1

Tribal harvest of salmon and steelhead in western and Puget Sound Rivers)				
YEAR	CHINOOK	CHUM	PINK	COHO
1974	91,006	173,059	25	463,647
1975	126,854	79,427	105,164	442,662
1976	156,710	298,652	42	341,618
1977	147,927	182,524	180,136	468,003
1978	163,525	503,599	74	469,006
1979	141,292	103,769	760,071	541,711
1980	191,021	465,746	332	889,663
1981	179,168	285,629	1,177,398	547,963
1982	180,574	473,382	78	930,687
1983	168,619	279,545	820,343	637,242
1984	181,452	403,509	68	582,857
1985	197,212	554,309	2,177,039	848,482
1986	178,692	663,659	113	1,023,625
1987	215,103	720,804	1,117,032	1,283,953
1988	239,931	889,485	67	880,889
1989	272,212	521,221	1,850,177	737,879
1990	249,115	570,984	301	806,175
1991	161,514	562,781	1,712,768	597,096
1992	132,372	778,892	121	399,307
1993	108,261	544,616	1,118,774	251,772
1994	89,067	793,891	214	450,734
1995	97,655	381,117	1,344,707	368,125
1996	95,080	260,790	54	263,320
1997	83,019	189,636	1,008,435	157,898
1998	73,023	318,678	515	188,857
1999	120,097	119,160	51,934	192,417
2000	84,230	156,069	349	446,770

Table 1

Washington (Ocean, Coastal Rivers, Puget Sound from 1974-2007.			
SOCKEYE	STEELEHEAD		TOTAL
58,984	4,885		791,572
133,657	0	*	887,764
110,492	12,066		919,580
396,125	14,386		1,389,101
256,253	17,734		1,410,191
429,004	15,089		1,990,936
284,757	20,696		1,852,215
569,880	22,729		2,782,767
1,407,535	24,771		3,017,027
219,993	25,437		2,151,179
851,099	1,744		2,020,729
1,574,557	25,996		5,377,595
1,357,347	93,618		3,317,054
997,568	80,968		4,415,428
519,377	82,275		2,612,024
1,126,586	47,363		4,555,438
1,193,441	47,121		2,867,137
849,898	32,220		3,916,277
300,665	58,405		1,699,762
1,397,235	31,180		3,451,838
960,166	30,013		2,324,085
243,350	31,072		2,466,026
287,262	30,467		936,973
680,717	21,369		2,141,074
311,621	39,578		932,272
20,694	24,674		528,976
320,390	26,226		1,034,034

YEAR	CHINOOK	CHUM	PINK	COHO
2001	147,550	752,144	319,279	501,374
2002	150,522	839,450	277	387,861
2003	130,664	786,594	551,798	312,432
2004	166,327	929,308	699	653,737
2005	141,595	348,376	240,525	432,485
2006	148,072	764,032	368	325,596
2007	150,941	802,513	315,311	278,945
	CHINOOK	CHUM	PINK	COHO
Total	5,160,402	16,497,316	14,854,588	18,104,788

SOCKEYE	STEELEHEAD		TOTAL
170,408	38,847		1,929,602
356,883	23,292		1,758,285
220,617	23,280		2,025,485
149,640	32,056		1,931,767
141,038	28,598		1,332,617
541,322	26,261		1,805,651
5,494	30,937		1,584,141
SOCKEYE	STEELEHEAD		TOTAL
18,444,055	1,065,454		74,126,602

Table 2. Combined treaty and harvest of salmon and steelhead

Year	Chinook	Chum	Pink	Coho
1974	913,602	462,444	1,238	2,549,666
1975	989,386	213,915	1,421,505	2,291,454
1976	1,043,705	825,348	2,006	2,894,444
1977	859,266	472,636	2,367,132	2,178,130
1978	737,079	1,293,591	1,791	1,910,228
1979	706,153	127,386	4,798,855	1,924,361
1980	702,906	1,013,373	1,061	2,048,024
1981	594,642	539,696	4,170,967	1,508,231
1982	613,397	1,114,581	198	1,992,064
1983	506,034	563,531	1,964,556	1,421,980
1984	456,012	782,471	155	1,143,208
1985	486,288	1,139,368	4,334,788	1,722,685
1986	487,278	1,229,457	169	2,102,617
1987	497,554	1,421,891	2,130,652	2,434,595
1988	541,131	1,787,225	196	1,669,579
1989	601,939	913,844	3,549,140	1,600,387
1990	561,095	1,108,503	775	1,842,303
1991	398,973	1,098,512	3,395,166	1,464,164
1992	395,784	1,519,972	692	839,803
1993	346,044	1,166,521	2,200,800	572,608
1994	194,587	1,373,922	257	531,884
1995	218,871	764,192	2,844,973	608,813
1996	228,959	814,559	109	497,194
1997	200,530	430,656	1,930,980	344,022
1998	141,422	852,712	1,071	363,051
1999	196,819	261,118	90,383	278,442
2000	160,029	311,546	446	637,912
2001	273,197	1,619,791	1,022,066	955,396
2002	329,346	2,017,876	534	631,026
2003	274,840	1,604,562	1,499,998	635,927
Total	**14,656,868**	**28,845,199**	**37,732,659**	**41,594,198**

non-treaty sport and commercial
in western Washington.

Sockeye	Steel-head	Other	Jacks	Un-known	Salmon and Steelhead
2,520,066	59,949	3,343	9,195	0	6,519,503
1,675,446	30,005	244	12,169	0	6,634,124
1,317,346	44,176	981	14,218	0	6,142,224
1,885,160	86,204	1,165	9,944	0	7,859,637
1,388,854	74,356	1,252	12,025	0	5,419,176
1,797,991	84,146	824	10,003	226	9,449,945
594,533	73,967	454	8,652	189	4,443,159
1,316,997	68,466	617	7,906	240	8,207,762
2,876,640	67,088	16,443	6,948	159	6,687,518
398,350	73,258	26,776	13,528	483	4,968,496
1,700,355	86,994	46,120	10,379	856	4,226,550
2,942,290	82,456	4,207	8,986	0	10,721,068
2,737,831	154,837	4,175	8,624	44	6,725,032
1,963,584	134,313	7,752	9,137	313	8,599,791
857,240	129,082	80,014	0	2,747	5,067,214
2,241,557	87,962	6,433	0	1,617	9,002,879
2,168,579	72,291	0	0	2,605	5,756,151
1,826,983	71,833	0	0	1,830	8,257,461
618,894	102,953	0	0	1,432	3,479,530
2,730,185	59,649	0	0	1,172	7,076,979
1,839,074	71,356	0	0	1,377	4,012,457
406,723	61,999	0	0	708	4,906,279
390,404	62,628	0	0	1,703	1,995,556
1,365,531	37,626	0	0	574	4,309,919
540,721	65,158	0	0	1,242	1,965,377
20,870	51,640	0	3	301	899,576
613,750	57,289	0	0	161	1,781,133
255,985	88,982	0	0	212	4,215,629
534,898	50,623	0	0	1,909	3,566,212
311,607	59,302	0	0	262	4,386,498
41,838,444	**2,250,588**	**200,800**	**141,717**	**22,362**	**167,282,835**

Table 3

Presumed Tribal harvest of sockeye salmon in western Washington (Ocean, Coastal Rivers, Puget Sound and Puget Sound Rivers) from 1979-2005				
Year	Total Tribal Sockeye Harvest	Tribal Sockeye Harvest Presumed to be of Canadian Origin[1]	Tribal Sockeye Harvest Presumed to be of US Origin[2]	% of Tribal Sockeye Harvest Presumed to be of Canadian Origin
1979	429,004	392,106	36,898	91.40%
1980	284,757	191,487	93,270	67.25%
1981	569,880	537,713	32,167	94.36%
1982	1,407,535	1,369,176	38,359	97.27%
1983	219,993	186,434	33,559	84.75%
1984	851,099	789,625	61,474	92.78%
1985	1,574,557	1,539,197	35,360	97.75%
1986	1,357,347	1,348,343	9,004	99.34%
1987	997,568	959,925	37,643	96.23%
1988	519,377	371,951	147,426	71.61%
1989	1,126,586	1,118,007	8,579	99.24%
1990	1,193,441	1,175,911	17,530	98.53%
1991	849,898	838,033	11,865	98.60%
1992	300,665	289,401	11,264	96.25%
1993	1,397,235	1,361,993	35,242	97.48%
1994	960,166	955,767	4,399	99.54%
1995	243,350	241,907	1,443	99.41%
1996	287,262	222,992	64,270	77.63%
1997	680,717	675,487	5,230	99.23%
1998	311,621	305,909	5,712	98.17%
1999	20,694	20,215	479	97.69%

Year	Total Tribal Sockeye Harvest	Tribal Sockeye Harvest Presumed to be of Canadian Origin[1]	Tribal Sockeye Harvest Presumed to be of US Origin[2]	% of Tribal Sockeye Harvest Presumed to be of Canadian Origin
2000	320,390	258,788	61,602	80.77%
2001	170,408	162,680	7,728	95.47%
2002	356,883	299,261	57,622	83.85%
2003	220,617	177,751	42,866	80.57%
2004	149,640	111,733	37,907	74.67%
2005	141,038	137,688	3,350	97.62%

[1] Stocks in this category are predominantly Fraser River stocks that are of Canadian origin. This category is known to include a small amount of intermingled US origin (Baker River, Lake Washington, Misc.) stocks but their numbers are considered minor in comparison.

[2] Stocks in this category are predominantly Lake Washington. There are other minor US origin stocks that may not be accounted for in this table.

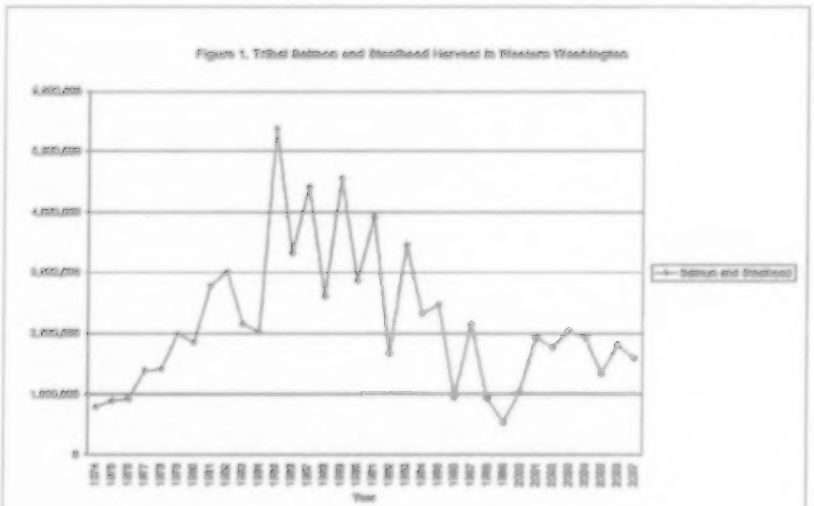


Figure 1. Tribal Salmon and Steelhead Harvest in Western Washington
Salmon and Steelhead
Year

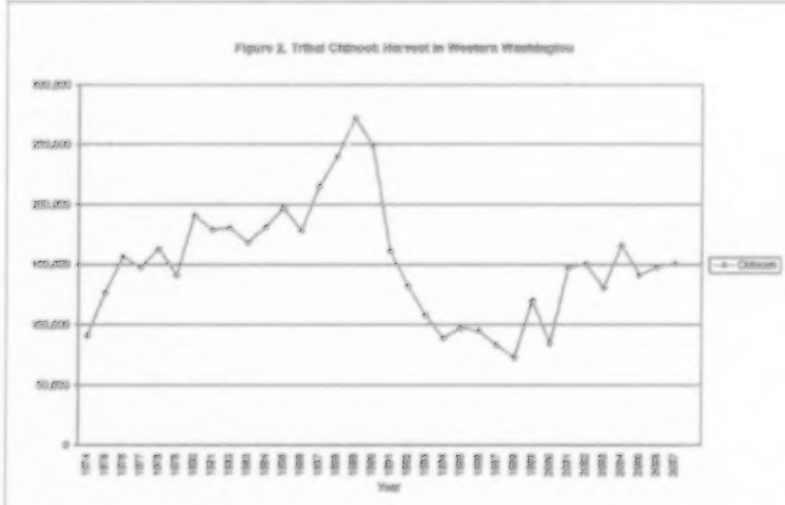
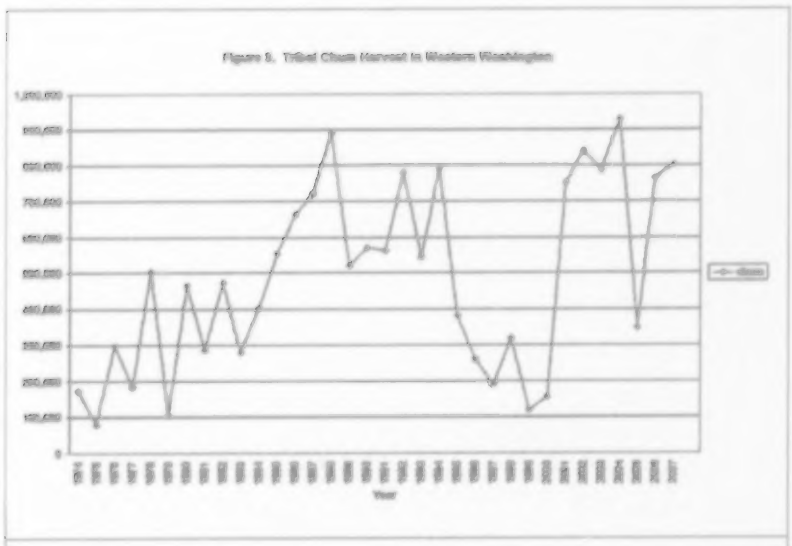


Figure 2. Tribal Chinook Harvest in Western Washington
Chinook
Year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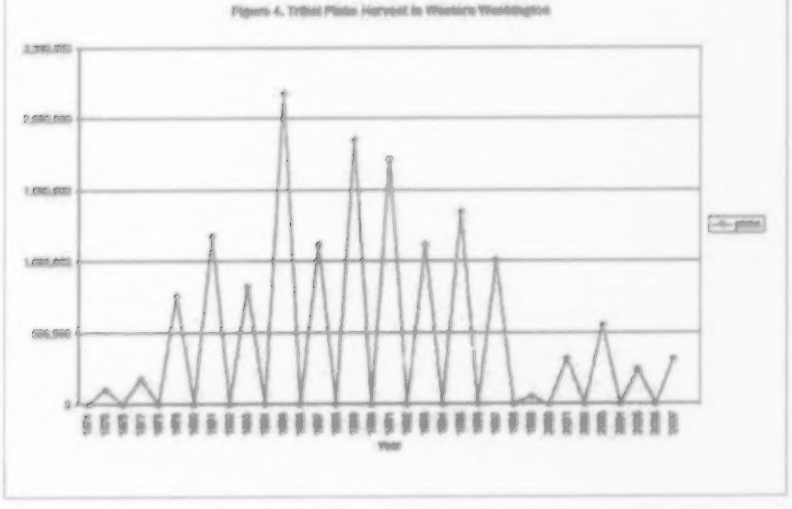
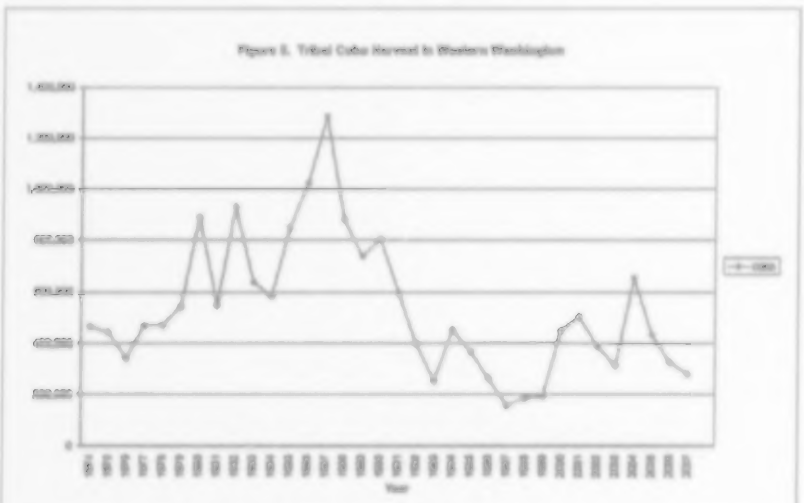
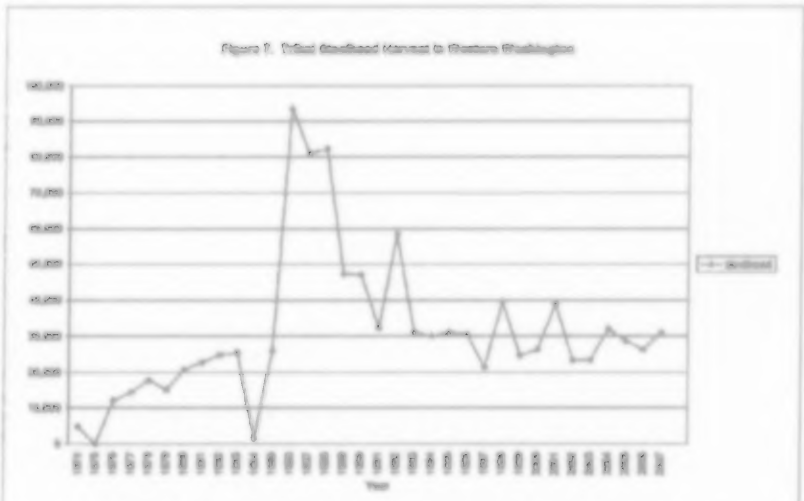
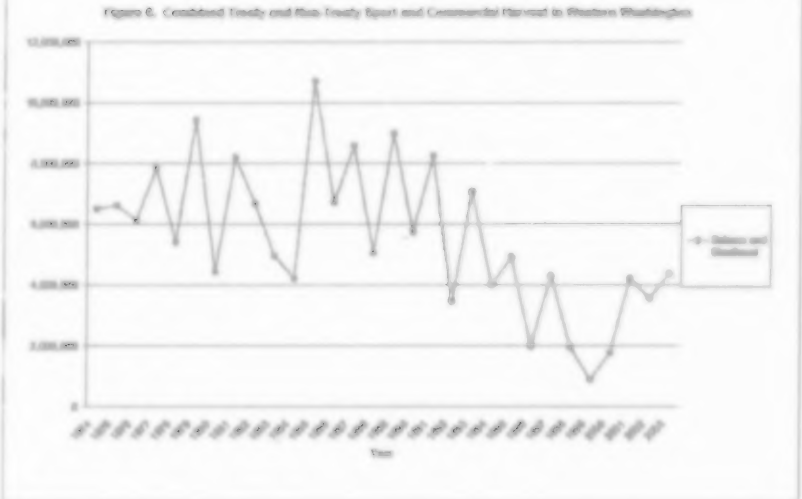
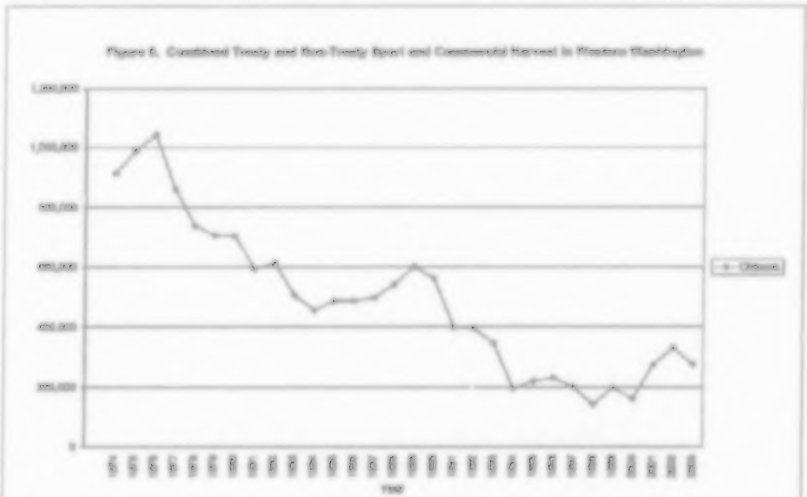
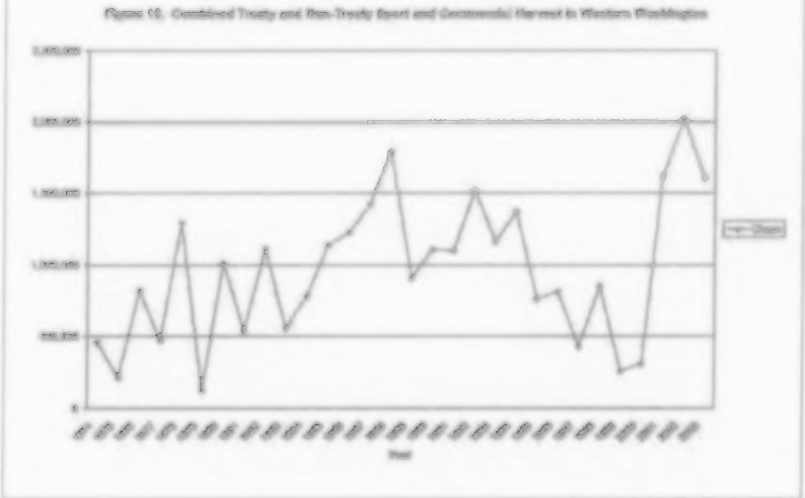

Year











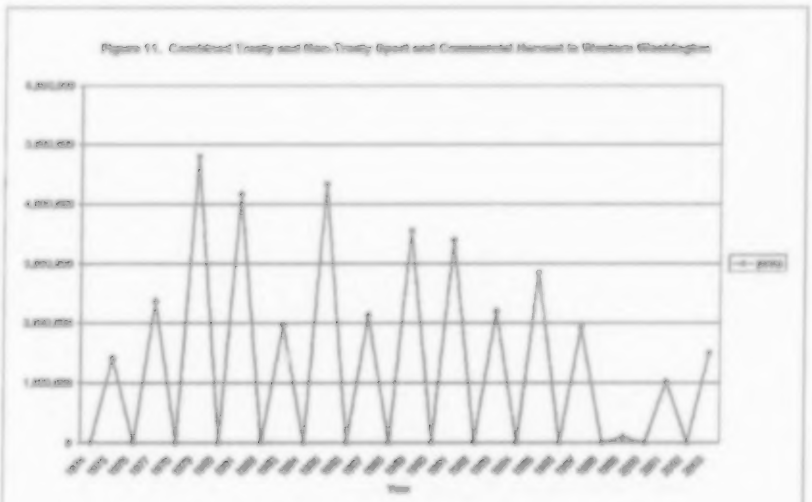


Figure 11. Combined Treaty and Non-Treaty Sport and Commercial Harvest in Western Washington

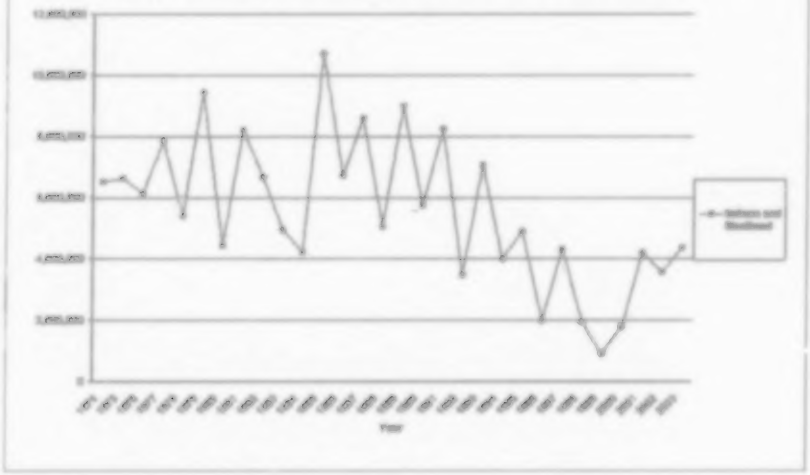


Figure 6. Combined Treaty and Non-Treaty Sport and Commercial Harvest in Western Washington

Figure 13. Combined Treaty and Non-Treaty Sport and Commercial Harvest in Eastern Washington

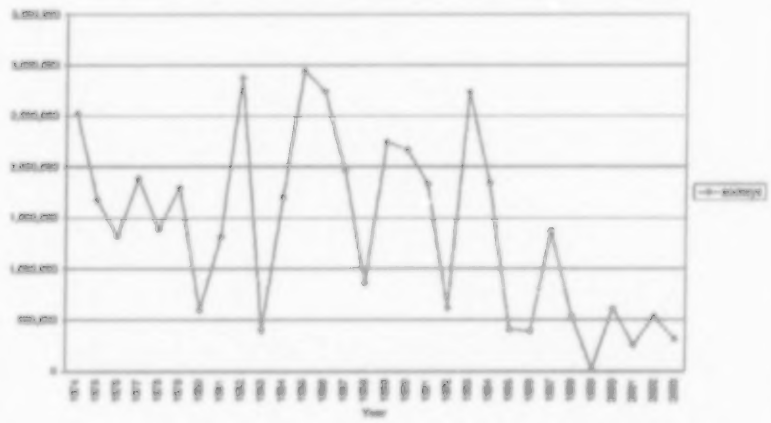
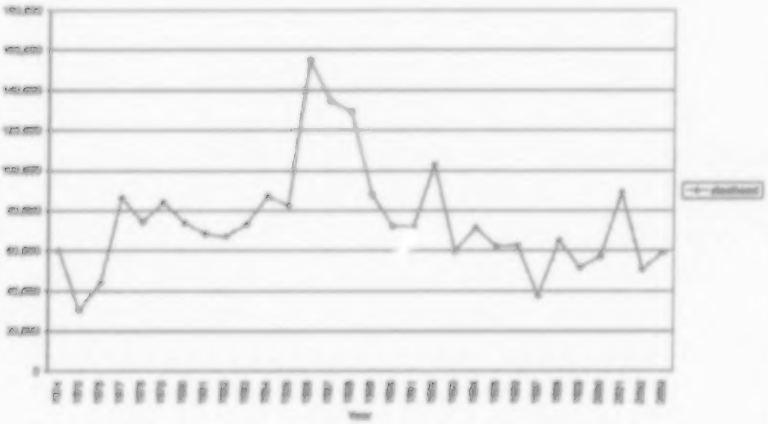


Figure 14. Combined Treaty and Non-Treaty Sport and Commercial Harvest in Western Washington



The Honorable Ricardo Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, et al., Defendants.	CASE NO. CV 9213RSM Subproceeding No. 01-1 DECLARATION OF YVONNE M. MARSH

I, Yvonne M. Marsh declare as follows:

1. I am a Paralegal Specialist for the United States Department of Justice, Environment and Natural Resources Division, Indian Resources Section. I have been employed with the Federal Government since 1981 and have been with the Indian Resources Section since approximately 1993. I have been assigned to work in the *United States v. Washington*, Culverts Subproceeding and to assist attorney, Peter Monson, in the *United States v. Washington* cases.

2. This declaration attaches and authenticates certain documents that the United States relies upon in its supplemental brief.

3. The documents obtained (and their current Internet addresses) are as follows:

a. Exhibit 1 is a true and correct copy of the cover page and pages 151, 176, and 231 of *the Status Review Update for Pacific Salmon and Steelhead Listed Under the Endangered Species Act — Pacific Northwest* (NMFS 2010), available on NOAA's website at http://www.nwr.noaa.gov/Publications/Biological-Status-Reviews/upload/SR-2010-all-species.pdf.

b. Exhibit 2 is a true and correct copy of the cover page and pages 1:3 and 3:8 of the *Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* (WDFW 2009), available on WDFW's website at http://www.wdfw.wa.gov/publications/00061/wdfw00061.pdf.

c. Exhibit 3 is a true and correct copy of pages 7:2 and 7:3 of the *WSDOT Hydraulics Manual* (WSDOT 2010), available on WSDOT's website at http://www.wsdot.wa.gov/publications/manuals/fulltext/M23-03/Chapter7.pdf.

d. Exhibit 4 is a true and correct copy of pages 42 and 43 of the *Fish Passage Barrier Inventory Progress Performance Report* (DOT/DFW 2012), which is available on WSDOT's website at http://www.wsdot.wa.gov/NR/rdonlyres/EBE727F4-30DF-4C12-A9A3-30FB5D897EC5/0/2012FishPassRpt.pdf.

e. Exhibit 5 is a true and correct copy of pages A:42, A:44, and A:46 of the *Finding of No Significant Impact 1-405 Bellevue to Lynnwood* Improvement Project (Federal Highway Administration 2011), available on WSDOT's website at . . . *[sic . . . just ended]*

[Original page 1]

Status review update for Pacific salmon and steelhead listed under the Endangered Species Act

Pacific Northwest[1]

Michael Ford (ed.), Tom Cooney, Paul McElhany, Norma Sands, Laurie Weitkamp, Jeffrey Hard, Michelle McClure, Robert Kope, Jim Myers, Andrew Albaugh, Katie Barnas, David Teel, Paul Moran and Jeff Cowen*

Northwest Fisheries Science Center
Conservation Biology Division
*Operations, Management and Information Division

December 10, 2010

Cite as: Ford MJ (ed.), Cooney T, McElhany P, Sands N, Weitkamp L, Hard J, McClure M, Kope R, Myers J, Albaugh A, Barnas K, Teel D, Moran P, Cowen J. 2010. Status review update for Pacific salmon and steelhead listed under the Endangered Species Act: Northwest. Draft U.S. Department of Commerce, NOAA Technical Memorandum NOAA-TM-NWFSC-XXX.

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[1] An equivalent report for California is available: Williams, T.H., S.T. Lindley, B.C. Spence, and D.A. Boughton. Draft (December 2010). Status review update for Pacific salmon and steelhead listed under the Endangered Species Act: Southwest. Draft U.S. Department of Commerce, NOAA Technical Memorandum NOAA-TM-SWFSC-XXX.

[Original page 151]

Puget Sound Chinook salmon: Updated Risk Summary

All Puget Sound Chinook populations are well below the TRT planning range for recovery escapement levels. Most populations are also consistently below the spawner-recruit levels identified by the TRT as consistent with recovery. Across the ESU, most populations have declined in abundance somewhat since the last status review in 2005, and trends since 1995 are mostly flat. Several of the risk factors identified by Good et al. (2005) are also still present, including high fractions of hatchery fish in many populations and widespread loss and degradation of habitat. Many of the habitat and hatchery actions identified in the Puget Sound Chinook recovery plan are expected to take years or decades to be implemented and to produce significant improvements in natural population attributes, and these trends are consistent with these expectations. Overall, the new information on abundance, productivity, spatial structure and diversity since the 2005 review does not indicate a change in the biological risk category since the time of the last BRT status review.

References

Good TP, Waples RS, Adams P (2005) Updated status of federally listed ESUs of West Coast salmon and steelhead. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-66., p. 598.

Myers, J. M., R. G. Kope, G. J. Bryant, D. J. Teel, L. J. Lierheimer, T. C. Wainwright, W. S. Grant, F. W. Waknitz, K. Neely, S. Lindley, R. S. Waples.

1998. Status review of Chinook salmon from Washington, Idaho, Oregon, and California. U.S. Dept. of Commerce, NOAA Tech. Memo., NMFS-NWFSC-35, 443 p.

Puget Sound Technical Recovery Team (PSTRT). April 30, 2002. Planning ranges and preliminary guidelines for the delisting and recovery of the Puget Sound Chinook Salmon Evolutionarily Significant Unit. http://www.nwfsc.noaa.gov/trt/Puget_docs/trtpopesu.pdf 20pp.

Ruckelshaus, M.H., K.P. Currens, W.H. Graeber, R.R. Fuerstenberg, K. Rawson, N.J. Sands, and J.B. Scott. 2006. Independent populations of Chinook salmon in Puget Sound. NOAA Technical Memorandum NMFS-NWFSC-78. 145pp.

Sands, N. J. 2009. A user's guide to the abundance and productivity (A & P) tables as developed for Puget Sound Salmon. From the Puget Sound Technical Recovery Team (PSTRT) Abundance and Productivity (A & P) Workgroup. Fourth draft, 20 April, 2009. (Available from N. J. Sands, Northwest Fisheries Science Center, 2725 Montlake Blvd. E., Seattle, WA 98112.)

Sands, N. J. 2007. Estimating missing age data for Pacific salmon cohort run reconstruction using the "age engine." Draft, 28 September, 2007. (Available from N. J. Sands, Northwest Fisheries Science Center, 2725 Montlake Blvd. E., Seattle, WA 98112.)

Shared Strategy 2007. Puget Sound Recovery Plan. Adopted by NMFS January 19, 2007. http://www.nwr.noaa.gov/Salmon-Recovery-Plann

ing/Recovery-Domains/PugetSound/PS-Recovery-Plan.cfm

[Original page 176]

Hood Canal summer chum salmon: Updated Risk Summary

The spawning abundance of this ESU has clearly increased since the time of listing, although the recent abundance is down from the previous 5-years. While spawning abundances have remained relatively high compared to the low levels in the early 1990's, productivity has decreased significantly for the last 5 brood years, being lower for brood years 2002-2006 than any previous 5-year average since 1971. This is a concern for future production. Since abundance is increasing and productivity is decreasing, this suggests that improvements in habitat and ecosystem function is needed. Diversity is increasing from the low values seen in the 1990s due both to the reintroduction of spawning aggregates and the the *[sic]* more uniform relative abundance between populations; this is a good sign for viability in terms of spatial structure and diversity. Spawning survey data shows that the spawning distribution within most streams has been extended further upstream as abundance has increased (WDFW and PNPTT 2007. Overall, the new information considered does not indicate a change in the biological risk category since the time of the last BRT status review.

References

Good TP, Waples RS, Adams P (2005) Updated status of federally listed ESUs of West Coast salmon and steelhead. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-66., p. 598.

Hood Canal Coordinating Council. 2007. Hood Canal & Eastern Strait of Juan de Fuca Summer Chum Salmon Recovery Plan. Adopted by NMFS May 24, 2007. http:/ fwww.nwr.noaa.gov/Salmon-Recovery-Planning/Recovery-Domains/Puget-Sound/HC-Recovery-Plan.cfm

Johnson, O. W., W. S. Grant, R. G. Kope, K. Neely, F. W. Waknitz, and R. S. Waples. 1997. Status review of chum salmon from Washington, Oregon, and California. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-32.

Sands, N.J. 2009. A user's guide to the abundance and productivity (A & P) tables as developed for Puget Sound Salmon. From the Puget Sound Technical Recovery Team (PS TRT) Abundance and Productivity (A & P) Workgroup. Fourth draft, 20 April, 2009. (Available from N. J. Sands, Northwest Fisheries Science Center, 2725 Montlake Blvd. E., Seattle, WA 98112.)

Sands, N.J. K. Rawson, K.P. Currens, W.H. Graeber, M.H. Ruckelshaus, R.R. Fuerstenberg,4 *[sic]* and J.B. Scott. 2009. Determination of Independent Populations and viability Criteria for the Hood Canal summer Chum salmon Evolutionarily Significant Unit. NOAA Technical Memorandum NMFS-NWFSC-101. 71 pp.

Washington Department of Fish and Wildlife and Point No Point Treaty Tribes (WDFW and PNPTT). 2000. Summer Chum Salmon Conservation Initiative. Washington Department of Fish and Wildlife and Point No Point Treaty Tribes, Olympia, WA. 423 pages + appendices. Available at http://wdfw.wa.gov/fish/chum/library/

Washington Department of Fish and Wildlife (WDFW) and Point No Point Treaty Tribes (PNPTT). 2003. Report on summer chum salmon stock assessment and *[sic . . . just ended]*

[Original page 231]

Summary

For all but a few putative demographically independent populations of steelhead in Puget Sound, estimates of mean population growth rates obtained from observed spawner or redd counts are declining—typically 3 to 10% annually—and extinction risk within 100 years for most populations in the DPS is estimated to be moderate to high, especially for *draft* populations in the *putative* South Sound and Olympic MPGs. Collectively, these analyses indicate that steelhead in the Puget Sound DPS remain at risk of extinction throughout all or a significant portion of their range in the foreseeable future, but are not currently in danger of imminent extinction.

Status and Trends in the Limiting Factors and Threats Facing ESU/DPS

The Biological Review Team identified degradation and fragmentation of freshwater habitat, with consequent effects on connectivity, as a primary limiting factor and threat facing the Puget Sound steelhead DPS. In the three years since listing, the status of this threat has not changed appreciably.

Hatchery releases

Hatchery releases of steelhead in Puget Sound have remained relatively constant over the last 20 years, although releases of Chinook and coho have declined (Figure 104).

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF PAUL J. WAGNER IN SUPPORT OF STATE OF WASHINGTON'S SUPPLEMENTAL BRIEFING

I, PAUL J. WAGNER, declare as follows:

1. I am a Branch Manager of the Washington State Department of Transportation (WSDOT) Environmental Services Office and manage the fish passage barrier correction program. This supplemental declaration is based on the best information available and provides an update on new and relevant facts which have arisen since my testimony in October 2009 for WSDOT's fish passage efforts.

2. For many years, WSDOT has recognized the need to provide fish passage at stream crossings. This recognition has continued to be manifested through the practical application of resources to salmon restoration, including barrier remediation. WSDOT has worked to correct fish passage barriers as part of highway improvement projects and through a separate dedicated-fund fish passage correction program.

3. WSDOT's efforts with fish passage have recently been recognized by the U.S. Federal Highway Administration (FHWA) as national examples of excellent environmental work. In October 2010, the FHWA presented WSDOT's fish passage program with the national Exemplary Ecosystem Award. In August 2011, I received FHWA's National Environmental Excellence Award for Leadership. This is presented to one person every two years and the award cited "coordination with WDFW resulting in the correction of over 250 culverts, improving over 800 miles of stream habitat to date" in the justification.

4 Since November 2010, WSDOT has also worked extensively with the National Marine Fisheries Service (NMFS), the Army Corps of Engineers, and FHWA to develop a programmatic process for ESA section 7 consultation on transportation projects. This includes an expedited approach for ESA compliance for fish passage restoration projects. NMFS issued a Biological Opinion signifying the completion of this consultation in November 2012.

FINANCIAL INVESTMENT

5. WSDOT continues to invest and make progress on fish barrier removal through its dedicated-fund program. Since October 2009, WSDOT has invested approximately $30 million dollars for the inventory, prioritization, and correction of high priority fish passage barriers. This $30 million investment funded 19 stand-alone fish passage projects with costs ranging from $191,270 to $6,750,667 per correction. Another 12 projects have

been constructed and funded as a part of other transportation projects.

6. WSDOT funds staff at Washington Department of Fish and Wildlife (WDFW) and coordinates with WDFW to inventory and prioritize fish barriers for correction. WSDOT has invested about $3.8 million for fish passage barrier inventory and prioritization since October 2009. In the 11-13 biennium, the funding for inventory and prioritization work is approximately $1.7 million dollars.

CULVERT INVENTORY

7. The fish passage barrier inventory has changed in scope several times since its inception. Streams are dynamic and proper conditions to assess fish passage are not always present. WSDOT continues its effort to keep the inventory information current and updated.

8. Beginning in the 09-11 biennium, WSDOT and WDFW started to reassess 357 culverts thought to have the highest likelihood of becoming barriers to evaluate their current status. Additionally, inventory crews revisit sites previously identified as barriers and reassess sites to ensure the information previously collected is accurate. This effort and dedication by WSDOT and WDFW results in the number of fish passage barriers being dynamic as barriers are being added and removed from the barrier list. Following the reassessments, WDFW records show as of July 2012, a statewide total for WSDOT of 1,988 fish passage barriers. Of those, 1,519 have significant habitat gain (at least 200 meters of potential fish habitat upstream). In the *United States v. Washington* Case Area, there are 1,000 barrier

culverts relevant to the case, of which 817 are barriers with significant habitat gain.

FISH BARRIERS REMOVED

9. When a fish passage barrier is identified and scheduled for correction, WSDOT works with WDFW to pick the best alternative for correcting the barrier. Culvert designs are based on the latest edition of WDFW's *Design of Road Culverts for Fish Passage Manual*. Where feasible, WSDOT prefers to use the most highly regarded design methodologies, which are stream simulation or a bridge, to correct culvert barriers. Through dedicated projects aimed at high priority fish barrier corrections, along with the corrections that are part of other highway improvement projects, WSDOT has corrected 31 barriers since October 2009. See Exhibit A. Twenty four of the 31 barrier corrections used either the stream simulation design or a bridge. The average cost of these 24 correction equaled $1,827,168 per correction. Twenty four of the 31 barrier corrections were located in the *United States v. Washington* Case Area. Collectively, the 31 barrier corrections improved fish access to more than 150 miles of potential habitat – which included 64 miles of potential habitat in the Case Area. Additionally, since October 2009, WDSDOT conducted extensive work on three culvert projects on SR 520 near Lake Washington. These corrections are expected to be completed in the summer of 2013.

10. WSDOT continues to make progress by investing in a prioritized approach because the habitat benefits of correcting individual culverts are not equal. As WSDOT moves down the prioritization

list, the amount of potential habitat that can be recovered through corrections will rapidly decline. Most of the habitat benefit can be obtained from the correction of a subset of barriers. As Exhibits B and C illustrate, the remaining 817 culvert barriers with significant habitat gain in the case area, over 50% of the potential habitat benefit is derived from correcting about 20% of the culverts.

I declare under the penalty of perjury that the foregoing is true and correct.

SIGNED at Olympia, Washington this 31st day of January, 2013.

s/Paul J. Wagner
PAUL J. WAGNER

EXHIBIT A – WSDOT Barrier Correction

WSDOT Region	Road	Site Id	Project Type	Mile Post	Stream	Tribto
1	SR 542	990606	Bridge	38.98	Chain-up Cr	NF Nooksack R
1	SR 542	991060	Stream Simulation	16.07	unnamed	Nooksack R
3	SR 305	990709	Stream Simulation	9.6	unnamed	Liberty Bay
3	US 101	991252	No Slope	335.02	unnamed	Hood Canal
3	SR 305	991742	Stream Simulation	9.88	Bjorgen Cr	Liberty Bay
4	US 101	992821	No Slope	3.3	unnamed	Columbia R
6	US 2	997498	No Slope	296.35	Deadman Cr	Little Spokane R
6	SR 27	998530	Stream Simulation	40.69	unnamed	Pine Cr
1	SR 548	990429	Stream Simulation	4.67	Terrell Cr	Birch Bay
1	SR 520	994119	Stream Simulation	5.81	unnamed	Yarrow Cr
1	SR 520	994459	Stream Simulation	4.48	unnamed	Lk Washington
1	SR 520	998987	No Slope	4.81	unnamed	Lk Washington
1	US 2	07.0939 0.40	Dam Removal	23.08	Wagleys Cr	Skykomish R
1	SR 20	AR11	Bridge	75.75	Red Cabin Cr	Skagit R
3	US 101	990032	Stream Simulation	102.14	unnamed	S Branch Big Cr
3	US 101	990729	Stream Simulation	100.9	unnamed	S Branch Big Cr
3	US 101	992493	Stream Simulation	68.99	unnamed	Lower Salmon Cr
3	I-5	999532	Stream Simulation	85.81	unnamed	Dry Cr
4	SR 105	990307	Bridge	16.57	Norris SL	Willapa R

Projects Completed Since June 2010.

WRIA	WSDOT Fund-ing	Cost*	Project Year	Lineal Gain (m)	Lineal Gain (mi)	PI	Spawn-ing Area (m^2)	Rear-ing Area (m2)
01	DI	1,286,196	2010	276	0.2	14.63	370	491
01	TP		2010	188	0.1			
15.0291	DI	2,887,452	2010	2,803	1.7	24.15	2,135	7,364
16.0218	OT		2010	210	0.1	12.24	617	268
15.0290	DI	3,546,564	2010	1,520	0.9	17.21	2,387	1,793
24	OT	49,698	2010	1,400	0.9	21.23	0	19,968
55.0051	TP		2010	92,225	57.3			
34	TP		2010	7,500	4.7			
01.0089	DI	1,553,230	2011	11,313	7.0	26.44	2,767	52,518
08	TP		2011	522	0.3	6.36	501	528
08.0257	TP		2011	2,391	1.5	14.8	888	985
08	TP		2011	1,051	0.7			
07.0939	DI	687,462	2011	15,105	9.4	50.82	4,785	45,461
03.0343	OT	3,610,665	2011	14,000	8.7			
22.0059	DI	1,071,041	2011	7,870	4.9	25.82	2,643	19,327
22.0059	DI	844,713	2011	1,202	0.7	17.97	13	2,895
24.0106	DI	1,505,251	2011	4,606	2.9	14.46	857	7,163
23	TP		2011	1,620	1.0			
24	OT	2,801,399	2011	2,500	1.6			

WSDOT Region	Road	SiteId	Project Type	Mile Post	Stream	Tribto
1	SR 9	931684	No Slope	2.65	unnamed	Great Dane Cr
1	SR 530	990151	Stream Simulation	42.99	Fortson Cr	NF Stillaguamish R
1	SR 167	991486	Stream Simulation	25.65	Panther Cr	Springbrook Cr
1	SR 520; WB on-ramp	994234	Stream Simulation	5.95	Yarrow Cr	Lk Washington
1	SR 520	991736	Stream Simulation	6.04	Yarrow Cr	Lk Washington
1	SR 520; WB on-ramp	994227	Stream Simulation	5.95	Yarrow Cr	Lk Washington
1	I-90	08.0183 1.60	Stream Simulation	18.83	EF Issaquah Cr	Issaquah Cr
3	SR 112	990304	Stream Simulation	47.1	Nelson Cr	Lyre R
3	SR 112	991730	Stream Simulation	25.6	unnamed	Pysht R
4	US 97	990052	Bridge	21.35	Butler Cr	E Prong Little Klickitat R
4	I-5	994301	Fishway	81.77	China Cr	Chehalis R
6	SR 21	990096	Stream Simulation	172.85	Curlew Cr	Kettle R

*Cost from the Transportation Executive Information
**Site 994234 is the most DS feature on Yarrow Creek. the potential habitat gain for these features are not

WRIA	WSDOT Funding	Cost*	Project Year	Lineal Gain (m)	Lineal Gain (mi)	PI	Spawning Area (m^2)	Rearing Area (m2)
08	TP		2012	200	0.1			
05.0254	DI	1,824,066	2012	1,030	0.6	12.92	860	1,391
09.0006	TP	6,750,667	2012	5,992	3.7			
08.0252	TP		2012	6,418	4.0	22.08	1,682	13,826
08.0252	TP		2012	**	**	23.18	*	*
08.0252	TP		2012	**	**	23.18	*	*
08.0183	DI	3,146,699	2012	12,900	8.0	46.85	25,294	39,818
19.0032	DI	1,985,457	2012	4,684	2.9	11.29	2,243	2,334
19	DI	983,588	2012	3,347	2.1	20.31	1,644	4,003
30.0140	DI	2,722,498	2012	22,067	13.7	7.46	20,754	19,275
23.0870	TP	191,270	2012	8,289	5.2	14.61	2,842	14,839
60.0288	TP	435,422	2012	23,909	14.9			

30,113,428

TOTALS: 257,138 159.8

73,282 254,247

System (TEIS) on 1/17/2013.
Sites 991736 and 994227 are upstream and therefore included in the total.

EXHIBIT B

Figure_. Graph showing the relationship between fixing barrier culverts relevant to the culvert court case and the present of potential habitat gain realized using a prioritization process. The amount of habitat upstream of each culvert barrier is quite variable. Most of the habitat is opened by fixing a subset the culverts (i.e. over 50% of the habitat comes from about 20% of the culverts). There is a diminishing habitat contribution benefit from fixing the lower priority culverts.

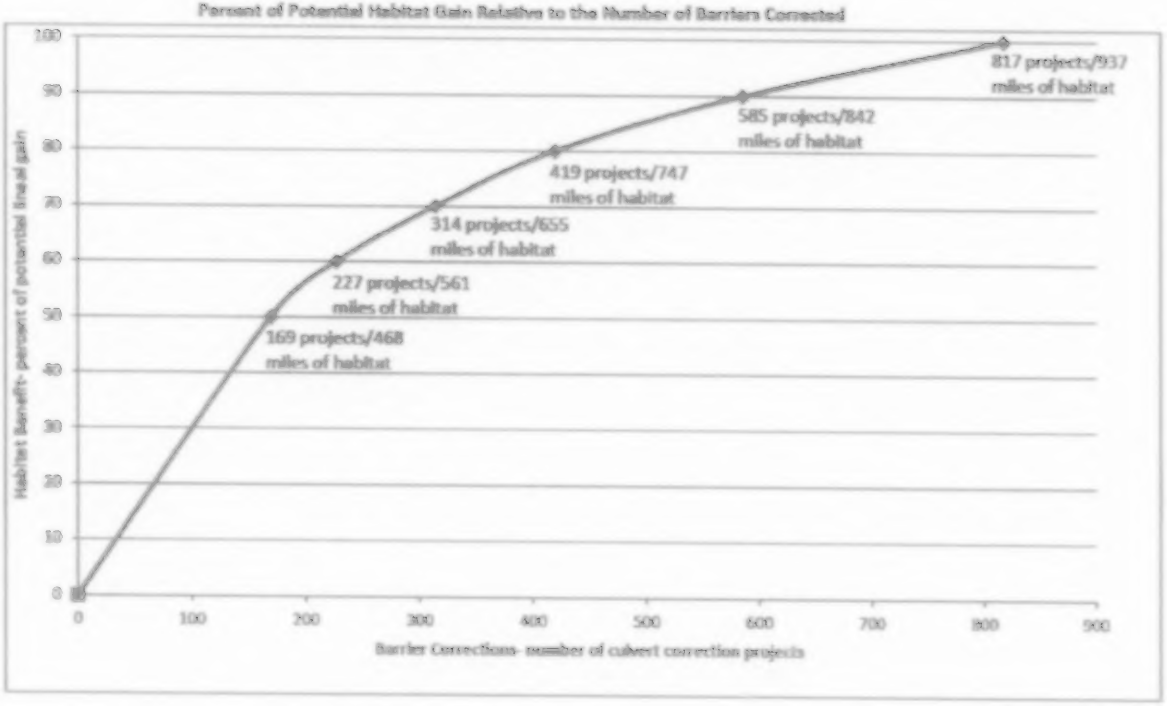
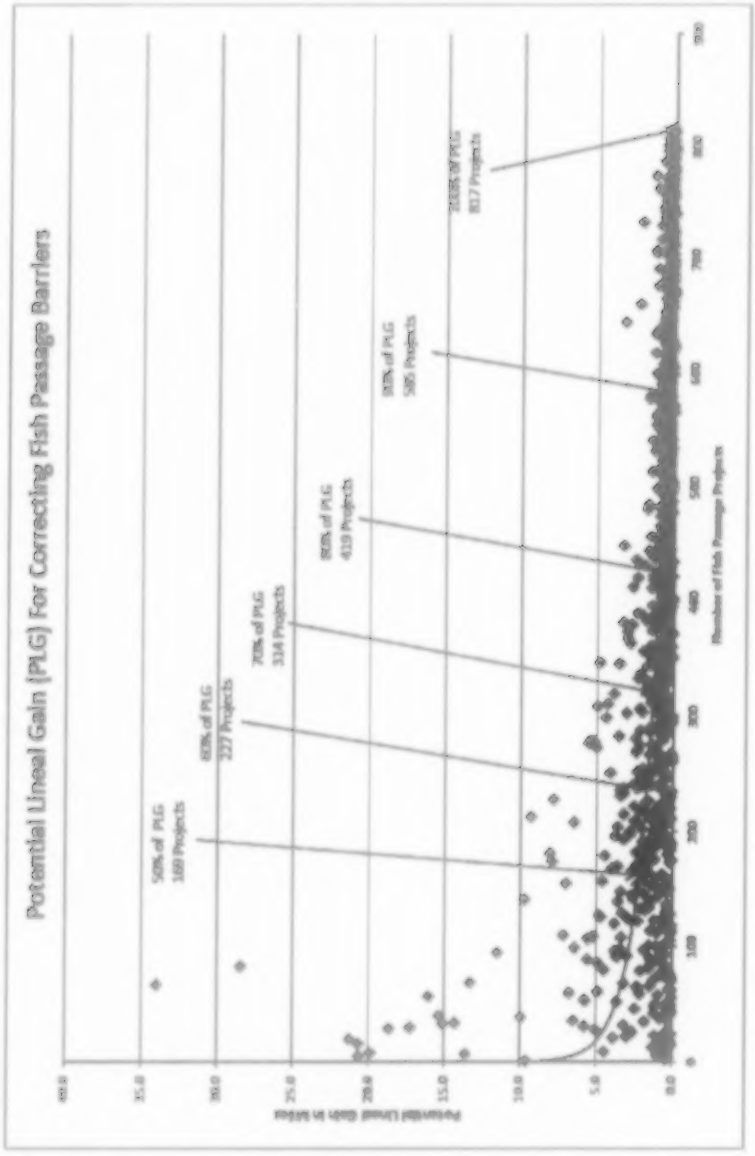

Percent of Potential Habitat Gain Relative to the Number of Barriers Corrected
Habitat Benefit- percent of potential final gain
100
90
80
70
60
50
40
30
20
10
0
0
100
200
300
400
500
600
700
800
900
Barrier Corrections- number of culvert correction projects
169 projects/468 miles of habitat
227 projects/561 miles of habitat
314 projects/655 miles of habitat
419 projects/747 miles of habitat
585 projects/842 miles of habitat
817 projects/937 miles of habitat

EXHIBIT C

Plot showing the potential lineal gain for each fish passage barrier using the barrier culverts in the file AnadromousCaseArea09-12.xlsx sorted by the PI and showing upstream WSDOT barriers being corrected in conjunction with downstream barrier in the same system. The number of barrier corrections and the potential lineal gain is based upon estimate for the remaining 817 barrier culverts with significant habitat gain relevant to the court case. All culverts are not the same. By prioritizing barrier correction, about 20% of the barrier corrections provide over 50% of the potential habitat benefit.


Potential Lineal Gain (PLG) For Correcting Fish Passage Barriers
50% of PLG
169 Projects
60% of PLG
227 Projects
70% of PLG
334 Projects
80% of PLG
419 Projects
85% of PLG
585 Projects
95% of PLG
817 Projects
Number of Fish Passage Projects

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, v. STATE OF WASHINGTON, et al., Defendant.	CASE NO. CV 9213RSM Subproceeding No. 01-1 DECLARATION OF ALIX FOSTER

I, ALIX FOSTER, declare as follows:

1. I am an attorney for the Swinomish Indian Tribal Community (SITC), a plaintiff herein.

2. This declaration describes my actions since the Court's January 11, 2013 Order Dkt. 733) to obtain information from the State and attaches and authenticates certain documents that the Tribes rely upon in their supplemental brief.

3. Pursuant to the Public Records Act (PRA), Ch.42.56 RCW, SITC sent separate requests to the Washington Departments of Transportation (WSDOT), Natural Resources (WDNR) and Fish and Wildlife (WDFW) and the Washington Parks and Recreation Commission (Parks) on January 16, 2013. Generally speaking, SITC sought records regarding the State's efforts to correct culverts in the case area since discovery closed in this action. On January 18 and 23, 2013, respectively, WDNR and WDFW produced their current culvert inventory databases. WSDOT, WDFW, and Parks have produced other

records in response to the requests, but no agency has fulfilled the request and each has told us it cannot do so by February 1, 2013.[1]

4. On January 24, 2013, I suggested to Mr. Shorin, WDFW Counsel, that the parties attempt to stipulate to certain updated admitted facts. On January 29, 2013, after receiving no response, I emailed my request to all opposing counsel. The next day, Mr. Tomisser, lead counsel for the State, emailed that it was "too close to [February 1] . . . to switch to an approach based on stipulations."

5. WSDOT and WDNR publish to their respective websites annual reports summarizing their culvert correction efforts. As of January 31, 2013, neither website had published a copy of a 2013 annual report summarizing the agency's efforts in 2012.

6. The exhibits to my declaration that are listed in the attached table are true and correct copies of excerpts of Washington State publications posted on Washington State websites or produced by

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[1] WSDOT failed to produce anything at all for 13 days and then produced approximately 1,700 pages of documents within 48 hours of the Court's February 1 deadline. WDFW failed to produce anything at all for 7 days, produced its database on January 23, released only 3 additional documents in the following week, and then produced over 1,800 pages of documents within 48 hours of the deadline. Parks failed to produce anything at all for 9 days, produced 12 documents on January 25, and has not produced anything since. WDNR initially produced its database on January 18 and did not produce anything again until today when it provided additional layers for its database.

Washington State agencies under the PRA in response to SITC's PRA requests.

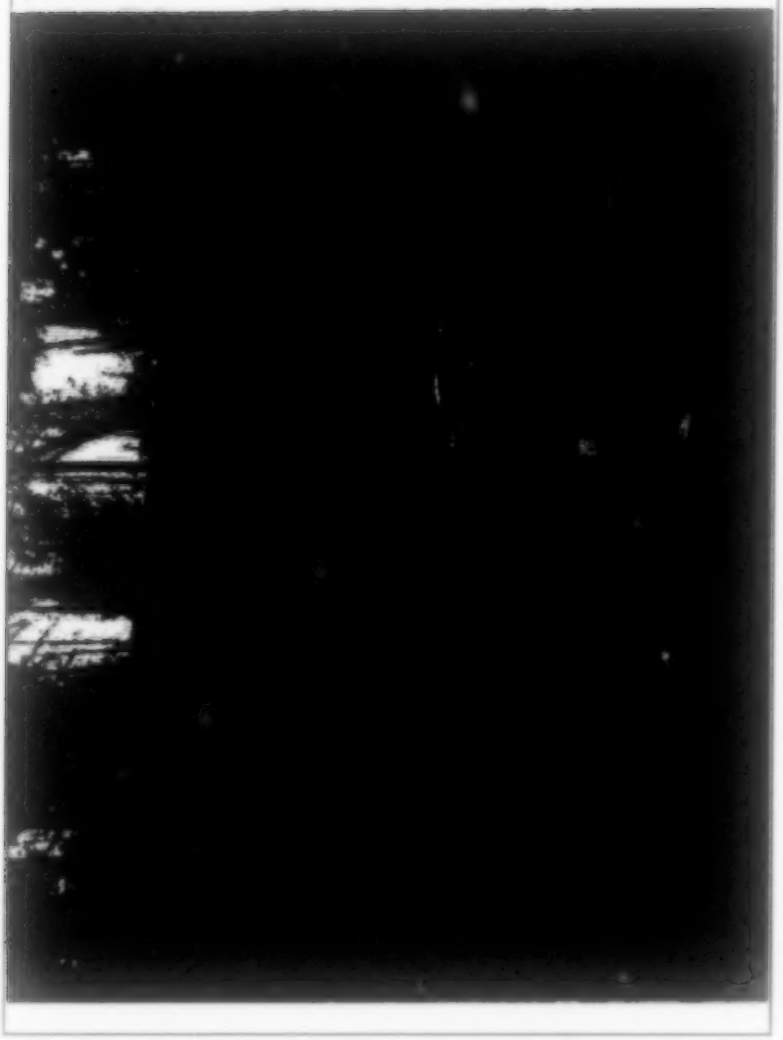
Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed this *1st* day of February, 2013, in La Conner, Washington.

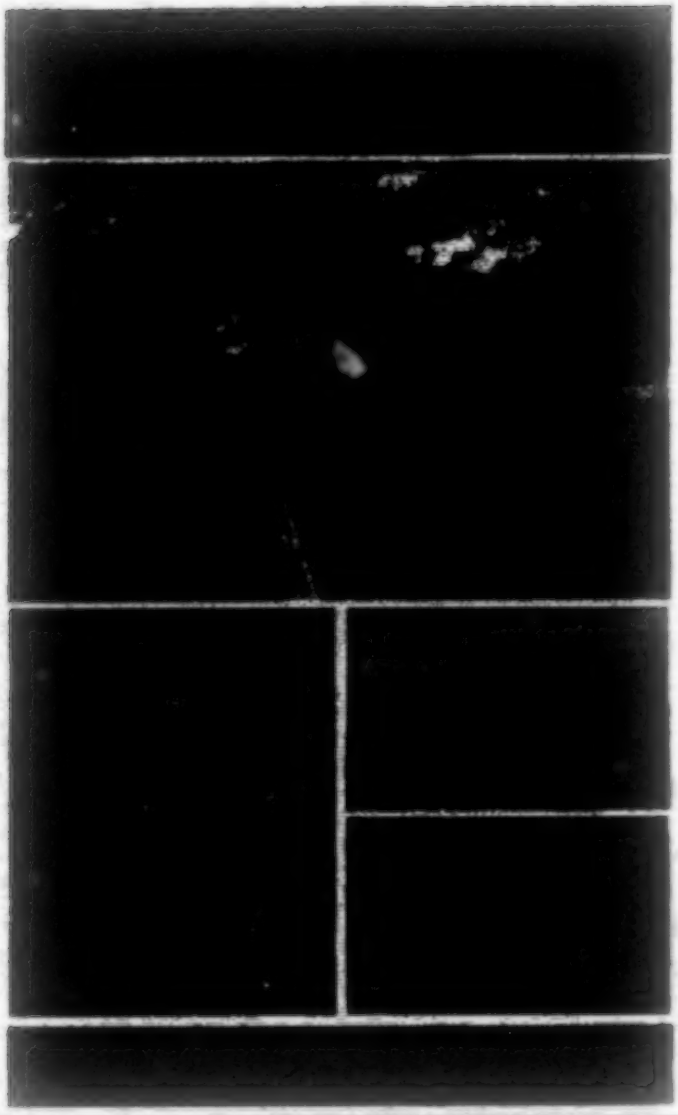
s/Alix Foster
Alix Foster

[Original page 26]

Original page 27]



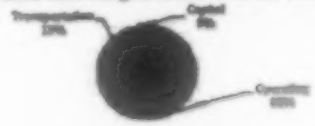
[Original page 31]



[Original page 32]

How Big Is The Overall State Budget?

As of the close of the 2012 Legislative Session, the State of Washington will spend a total of $74.5 billion for the 2011-13 biennium. That is an average of just over $101 million per day during the two-year spending period. This $74.5 billion includes amounts from three different budgets, which are plans of how the state will spend the money. The relative size of each of the three state budgets is shown in the following chart:



2011-13 State Budgets
(Dollars in Billions)

Operating Budget	$60.9
Transportation Budget	9.9
Capital Budget*	3.7
Total	$74.5

*Excludes Capital Re-appropriations (approximately $2.1 billion).
Sources: Wiznet and Buildnet budget development systems for the 2012 Session.

- The budget that pays for the day-to-day operations of state government (including federal funds and dedicated funds) is called the Operating Budget ($60.9 billion).
- The budget that pays for transportation activities, such as designing and maintaining roads and public transit, is called the Transportation Budget ($9.9 billion). This budget includes amounts appropriated for both transportation operating activities ($3.1 billion) and transportation capital activities ($6.8 billion).
- The budget to acquire and maintain state buildings, public schools, higher education facilities, public lands, parks, and other assets is called the Capital Budget ($3.7 billion).

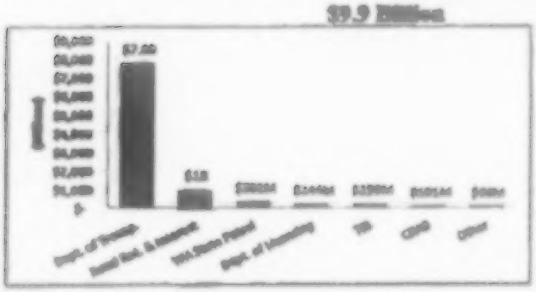
Budget-related materials frequently refer to the Near General Fund-State ("NGF-S"), which is the largest state fund; it represents more than half of the $60.9 billion operating budget.

[Original page 33]

HOW ARE TRANSPORTATION FUNDS SPENT BY AGENCY?

2011-13 Transportation Budget by Major Agency

$9.9 Billion



(See Page 19 for description of TIB and CRAB)

Washington Department of Transportation

The Washington Department of Transportation's (WSDOT) biennial budget is split approximately 82% for capital expenditures and 18% for operating expenditures. Operating programs and activities include maintenance of the state highway system, traffic services, ferry operations and security, highway traffic enforcement, traveler information, aviation services and transportation planning and research. Capital programs and activities include highway preservation and improvement projects, ferry boats and terminal preservation and rail line or car purchases and improvements.

[Original page 34]

Transportation Revenue Forecast Council

November 2012 Transportation Economic and Revenue Forecasts

Volume I: Summary

[Original page 35]

In FY 2010, transportation revenues were $2.014 billion which was a decline of 1% over the prior fiscal year as the economy struggled from the recession. In FY 2011, transportation revenues increased slightly to $2.05 billion or 2.3% growth over FY 2010. In FY 2012, transportation revenues are up again nominally to $2.09 billion or 1.7% annual increase. In FY 2013, transportation revenues are projected to be $2.210 billion, which represents an annual increase of 5.8% and a 0.1% revision from the September forecast. Overall during the 10-year horizon, transportation revenues are projected to be $33.10 billion with an average growth rate of 1.3% each year.

Figure 1 Total Transportation Revenues Comparison
November vs September 2012 forecasts
Millions of dollars

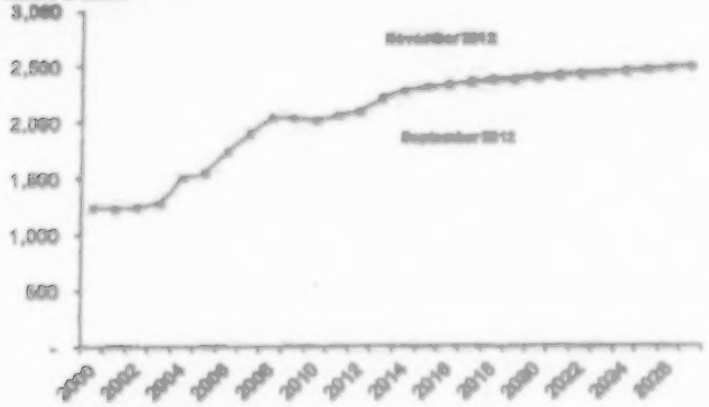
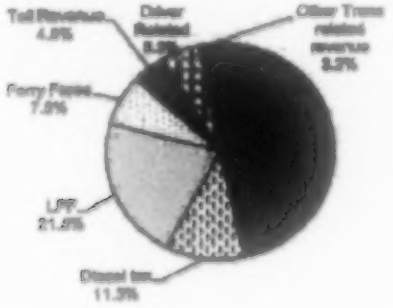
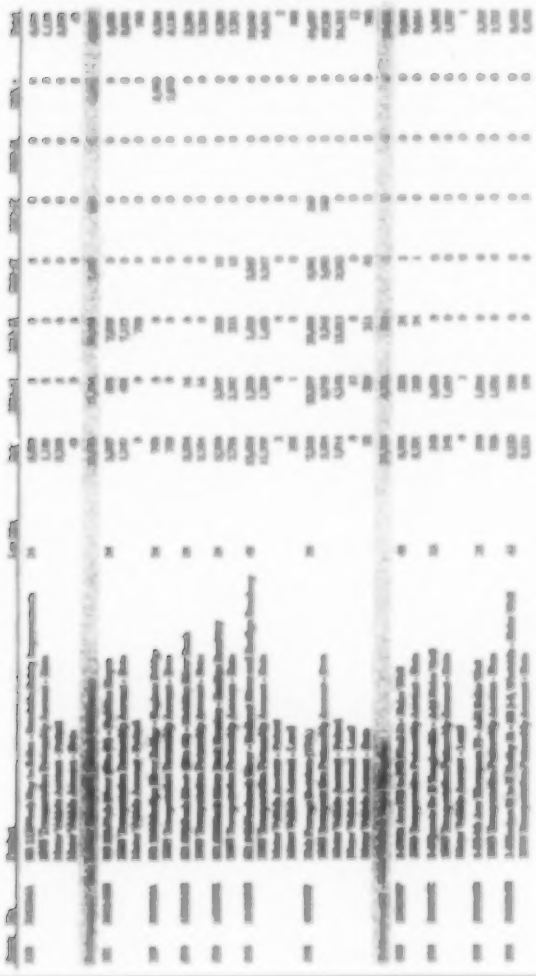


Figure 2 Revenue by Source
2011-13 biennium ($4.310 billion)



[Original page 36]

LEAP Transportation Document 2012-2C as developed
March 14, 2012
2003 Nickel Account and 2005 Transportation
Partnership Account Projects
Highway Improvements Program (I)
(Dollars in Thousands)



UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMEMRICA, et al. Plaintiff, v. STATE OF WASHINGTON, et al., Defendant.	CASE NO. CV 9213RSM Subproceeding No. 01-01 DECLARATION OF KEITH LUTZ

I, KEITH LUTZ, declare as follows:

1. I re-aver and incorporate ¶¶ 1-4 of my Aug. 11, 2006 Declaration ("Dec.") (Dkt. 299).

2. Using the methods described in Dec. ¶ 4, final Tribal harvest data 2008-2011 was:

	Chinook	chum	pink	Coho
2008	207,446	569,829	758	337,604
2009	184,881	355,560	1,946,714	508,356
2010	284,493	546,781	1,714	322,852
2011	285,147	621,129	2,280,645	379,952
TOTAL	961,967	2,093,299	4,229,831	1,548,764

	sockeye	steelhead	total
2008	46,043	37,564	1,199,244
2009	12,107	44,027	3,051,645
2010	1,242,303	48,369	2,446,512
2011	218,612	49,086	3,834,571
TOTAL	1,519,065	179,046	10,531,972

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

s/Keith Lutz
Keith Lutz
Date: *1-31-13*
At: *Lacey, WA*

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF JEFFREY P. KOENINGS, PH.D., IN LIEU OF DIRECT TESTIMONY

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I, JEFFREY P. KOENINGS, Ph.D., declare as follows:

1. I currently hold a position with the Washington State Recreation and Conservation Office. The Recreation and Conservation Office manages grant programs and supports several boards whose work relates to fish conservation and outdoor recreation. I focus on international fisheries issues. I represent the States of Washington and Oregon on the Pacific Salmon Commission established under the Pacific Salmon Treaty between the United States and Canada. I have over 30 years of professional experience with salmon fisheries issues in western North America. My resumé is attached (Exhibit A).

2. I hold a Bachelor of Science in Fisheries, a Master of Science in Water Resources, and a Doctor of Philosophy in Natural Resources, all from the University of Michigan. I pursued post-doctoral studies as a National Science Foundation Post-Doctoral Fellow at the University of North Carolina at Chapel Hill.

3. After completing post-doctoral work, I spent over 20 years working for the Alaska Department of Fish and Game. I began my career as a research scientist studying the productivity of coho and sockeye salmon populations in freshwater

habitat, and the marine survival of coho and sockeye salmon. Because of my statewide responsibilities, I became an expert in the relationship between the flow of nutrients in aquatic ecosystems and fish production throughout Alaska. I have published peer-reviewed research in leading international journals, book chapters, and symposium proceedings.

4. As my career progressed, I moved into the management and policy arenas. I managed Alaska's hatcheries program, and then its commercial fisheries program. For eleven years, I worked on issues related to Alaska's role under the U.S./Canada Pacific Salmon Treaty. I represented the State of Alaska on technical bodies established under the Treaty, and I advised Alaska decision-makers on related policy matters. I also served as Alaska's non-voting representative on the Pacific Fishery Management Council, a body that manages ocean fisheries between three and 200 miles off the coasts of Washington, Oregon, and California under federal law. Because Chinook salmon from the Puget Sound, Washington Coast, and Columbia River watersheds migrate to and are caught to varying degrees in fisheries in Southeast Alaska, I became familiar with Pacific Northwest salmon fisheries issues.

5. In late 1998, I was selected as the Director of the Washington Department of Fish and Wildlife (WDFW). I held that position for ten years, from January 1999 to December 2008. As WDFW Director, I managed a biennial budget of $340 million and a staff of 1,700 talented, dedicated people. I oversaw fisheries management in Washington and nearby ocean waters, I worked with Oregon officials to adopt concurrent regulations for Columbia River

fisheries, and I ran one of the largest hatchery systems in the world. Throughout that time, I worked extensively with tribal fishery co-managers on salmon harvest regimes, production of hatchery-origin salmon, and recovery planning and habitat actions to restore salmon. I was, and still am, deeply involved in salmon issues in the Pacific Northwest.

I. Salmon Abundance in the *United States v. Washington* Case Area And Factors That Affect It

6. The *United States v. Washington* Case Area is home to six species of Pacific salmon, including steelhead. Section 1.1 of Joint Exhibit 2a prepared for the 1973 trial in *United States v. Washington*[1] describes their general life histories. Salmon are "anadromous." These iconic Northwest species move throughout our entire aquatic ecosystem—beginning life in inland freshwater spawning streams, migrating down major river systems, sheltering along estuaries and coastlines, finally heading out to marine waters and then repeating their journey homeward—to complete their life cycle. Adverse or beneficial conditions anywhere along the path have dramatic effects on adult salmon abundance. Because of these effects, salmon hatcheries were established decades ago throughout the Pacific Northwest to stabilize the abundance of adult salmon, primarily to support fisheries, without much thought to the effects on wild

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[1] Joint Statement Regarding the Biology, Status, Management, and Harvest of the Salmon and Steelhead Resources of the Puget Sound and Olympic Peninsular Drainage Areas of Western Washington (May 14, 1973). (Excerpts attached as Exhibit B.)

salmon populations. The presence of hatchery-origin and wild salmon mixed together in many fisheries complicates harvest management, as managers strive to catch the hatchery fish while minimizing the incidental catch of wild fish that are now listed as threatened or endangered under the federal Endangered Species Act (ESA).

7. Pacific salmon populations from California to southern British Columbia have declined substantially over the past century. Many factors have contributed to the decline. Some, such as cyclic ocean conditions, are natural phenomena. Others, such as water pollution, are human-caused. The factors contributing to salmon population declines are summarized in an attached excerpt from the *Washington Statewide Strategy to Recover Salmon: Extinction is Not An Option—Summary* (September 1999) (Exhibit C), and at pages 5-45, 5-46, and 5-60 of the December 2008 Biological Opinion that the National Marine Fisheries Service (NOAA Fisheries) prepared in connection with the Pacific Salmon Treaty (attached as Exhibit D). The relative importance and effect of these factors, known as the "four H's" (harvest, hatcheries, hydroelectric power, and habitat), varies from species to species and watershed to watershed. Within the habitat "H," culverts that block fish passage can be a factor, but they are just one among many. For example, in its listing determinations under the federal Endangered Species Act, NOAA Fisheries has identified seven major habitat-related factors limiting salmon recovery statewide. Major limiting factors are the main attributes that must be addressed in recovery. Among the seven factors, we have made the most

progress, on average, in addressing fish passage issues. See Page 29, *2008 State of Salmon in Watersheds* (Exhibit E, Bates No. F0013133.)

8. In the early 1990s, the salmon's plight drew renewed public attention as federal Endangered Species Act listings began to occur in the Columbia River Basin. Just what was the condition of wild salmon in Washington? To answer that question, the Western Washington Treaty Tribes and the Washington Departments of Fisheries and Wildlife completed a Salmon and Steelhead Stock Inventory (SASSI) in 1992. State and tribal biologists sought to determine how many individual salmon and steelhead stocks there are in Washington, and the status of each. They defined a "stock" as "The fish spawning in a particular lake or stream(s) at a particular season, which fish to a substantial degree do not interbreed with any group spawning in a different place, or in the same place at a different season." Chinook salmon from Issaquah Creek are a SASSI "stock," for example. The 1992 SASSI became part of the basic information that policy makers used for salmon recovery efforts during the next decade.

9. During the 1990s, NOAA Fisheries conducted a systematic review of all salmon populations in California, Oregon, and Washington to determine whether they should be considered for listing as threatened or endangered under the federal Endangered Species Act. NOAA Fisheries developed a policy for identifying an "evolutionarily significant unit" of salmon (ESU) that would fit the ESA statutory definition of a "species." Steelhead salmon were grouped into "distinct population segments" for the same purpose. An ESU or "distinct population

segment" (DPS) may be broader than a "stock" as defined by SASSI, and may include several stocks.

10. Between 1994 and 1999, NOAA Fisheries identified dozens of Pacific salmon ESUs, reviewed the status of each and the factors affecting survival and abundance, and published the findings in the Federal Register. NOAA Fisheries conducted further reviews between 2003 and 2005. In 2008, the U.S. Fish and Wildlife Service initiated a review of the status of Lake Sammamish kokanee, a land-locked form of sockeye salmon. Here is a summary of the current Endangered Species Act status of anadromous salmon ESUs and steelhead DPSs in the *United States v. Washington* Case Area:

ESU or DPS	ESA Status	Federal Register Cite
Chinook Salmon		
Puget Sound Chinook	Threatened	63 Fed. Reg. 11482 (March 9, 1998) (proposed listing) 64 Fed. Reg. 14308 (March 24, 1999) (final listing) 70 Fed. Reg. 37160 (June 28, 2005) (reaffirmed listing)
Washington Coast Chinook	Not listed	63 Fed. Reg. 11482 (March 9, 1998)
Coho Salmon		
Puget Sound/ Strait of Georgia Coho	Species of Concern	69 Fed. Reg. 19975 (April 15, 2004)

Olympic Peninsula Coho	Not listed	60 Fed. Reg. 38011 (July 25, 1995)
Chum Salmon		
Puget Sound/ Strait of Georgia Chum	Not listed	63 Fed. Reg. 11774 (March 10, 1998)
Hood Canal Summer Run Chum	Threatened	63 Fed. Reg. 11774 (March 10, 1998) (proposed listing) 64 Fed. Reg. 14508 (March 25, 1999) (final listing) 70 Fed. Reg. 37160 (June 28, 2005) (reaffirmed listing)
Pacific Coast Chum	Not listed	63 Fed. Reg. 11774 (March 10, 1998)
Pink Salmon		
Odd-Year Pink	Not listed	60 Fed. Reg. 51928 (Oct. 4, 1995)
Even-Year (Snohomish) Pink	Not listed	60 Fed. Reg. 51928 (Oct. 4, 1995)
Sockeye Salmon		
Baker River Sockeye	Not listed	63 Fed. Reg. 11750 (March 10, 1998)
Ozette Lake Sockeye	Threatened	63 Fed. Reg. 11750 (March 10, 1998) (proposed listing) 64 Fed. Reg. 14528 (March 25, 1999) (final listing)

		70 Fed. Reg. 37160 (June 28, 2005) (reaffirmed listing)
Lake Pleasant Sockeye	Not listed	63 Fed. Reg. 11750 (March 10, 1998)
Lake Quinault Sockeye	Not listed	63 Fed. Reg. 11750 (March 10, 1998)
Steelhead		
Puget Sound Steelhead	Threatened	71 Fed. Reg. 15666 (March 29, 2006) (proposed listing) 72 Fed. Reg. 26722 (May 11, 2007) (final listing)
Olympic Peninsula Steelhead	Not listed	61 Fed. Reg. 41541 (Aug. 9, 1996)
Southwest Washington Steelhead	Not listed	61 Fed. Reg. 41541 (Aug. 9, 1996)

11. In 2002, the Washington Department of Fish and Wildlife updated the 1992 Salmon and Steelhead Stock Inventory, now called the Salmonid Stock Inventory (SaSI). Tables showing the 2002 status of stocks that spawn within the *United States v. Washington* Case Area are attached as Exhibit F. (Stocks from Willapa Bay, which is outside the Case Area, are also shown on the tables.) Here is a summary:

Condition of Salmon and Steelhead Stocks in U.S. v. Washington Case Area, as Reported in 2002 WDFW Salmonid Stock Inventory (SaSI)					
Region	**Healthy Stocks**	**Depressed Stocks**	**Critical Stocks**	**Stocks Whose Status is Unknown**	**Extinct Stocks**
North Puget Sound	25	15	2	24	0
South Puget Sound	28	14	3	12	1
Hood Canal	17	14	2	8	6
Strait of Juan de Fuca	11	9	5	16	1
North Coast	31	3	1	34	0
Grays Harbor	16	8	0	4	0
TOTALS	128	63	13	98	8

12. The ESA reviews and the 2002 SaSI tables only hint at the wide variation in the condition of *U.S. v. Washington* Case Area salmon and steelhead stocks. For example, wild chum salmon that spawn in Kennedy Creek, which flows into Totten Inlet in Mason County, are so numerous that the Kennedy Creek fall chum run has become a tourist attraction. But wild summer chum from Hood Canal are listed as threatened under the ESA.

13. Because they are only a snapshot, the SaSI tables do not show the year-to-year variability in run sizes. A scouring winter flood in a particular watershed can depress a stock for years, for example. That may have happened to Quillayute Chinook salmon in December 2007. Conditions that

affect the amount of food available to salmon while they are maturing in the ocean can have a large impact on the abundance of many stocks. Short-term El Niño events, and the long-term Pacific Decadal Oscillation, are cyclic natural phenomena that affect ocean water temperatures and currents—and food availability for salmon. When food is scarce, salmon die, and state and tribal fishery co-managers must constrain fisheries on the returning adults. We saw several years of poor ocean conditions for Pacific Northwest salmon, and meager fisheries, during the mid-1990s. Those effects are illustrated in tribal harvest numbers shown in the tables and graphs attached to the Declaration of Keith Lutz in Support of Tribes' Motion for Summary Judgment (Doc. No. 18654/299) (attached as Exhibit G). Climate change, and its potential effects on the salmon life cycle, pose additional challenges and unknowns. Some of these are briefly described in the attached testimony that I provided to a United States Senate committee in 2008 (Exhibit H).

14. The SaSI tables do not include salmon stocks that spawn in Canada, but some Canadian salmon stocks are important contributors to treaty Indian and non-treaty fisheries within the *United States v. Washington* Case Area. Historically, the Fraser River in British Columbia supported huge runs of sockeye and pink salmon, as well as chum, coho, and Chinook. Fraser River salmon migrate in variable numbers through Washington waters in the Strait of Juan de Fuca and northern Puget Sound on their way to the Fraser River mouth at Vancouver. They pass through the usual and accustomed fishing grounds of nine of the *United States v. Washington* Tribes. The

Pacific Salmon Treaty governs allocation of the catch between Canadian and American fishermen, and orders in *United States v. Washington* govern treaty Indian/non-Indian allocation in the United States. A special panel established under the Pacific Salmon Treaty manages fisheries on Fraser River fish. *United States v. Washington* Tribes and WDFW have representatives on that panel.

15. Salmon from the Fraser River and some other British Columbia rivers have been struggling in recent years, just like their neighbors to the south. There have been three failures of the Fraser River sockeye run since 1998. The Fraser River sockeye fisheries failed in 1999, 2007, and 2008. As shown in the figures provided by the Tribes in the Declaration of Keith Lutz (Exhibit G, attached), the strength of the Fraser run can make a big difference in the overall tribal catch. In 1985, 20 percent of the Tribes' total catch was Canadian-origin sockeye, but in 1999, a year in which the Fraser River sockeye fisheries failed, only four percent of the Tribes' total catch was Canadian-origin sockeye.

16. Because many factors affect salmon abundance, catch levels in fisheries can fluctuate over time. Though 2008 was a poor year for Fraser River sockeye, we saw record returns of sockeye to the Columbia and Snake River Basins, the highest since 1950. Similarly, catch levels in Chinook fisheries in the North Pacific region have varied dramatically from each other in recent years. Chinook salmon from many rivers, including Washington rivers, mature in the marine waters off Southeast Alaska and British Columbia. Fisheries in those waters are set according

to the overall number of Chinook available. Between 2005 and 2008, the pre-season Chinook abundance-based catch levels decreased by about 50% off Southeast Alaska and Northern British Columbia, but remained fairly stable off the West Coast of Vancouver Island.

II. Efforts to Make Things Better for Salmon: Integrating or Connecting "The Four Hs"

A. Introduction

17. The late 1990s were times of turmoil in salmon fisheries management in the Pacific Northwest. For several years, the United States and Canada had been unable to agree on an update to the Pacific Salmon Treaty, which limits catches in fisheries on salmon stocks that migrate between the two countries. Heavy fishing in both countries was putting salmon stocks at risk. In the Columbia River, several salmon and steelhead stocks had been listed as threatened and endangered under the federal Endangered Species Act. In *United States v. Oregon*, the Columbia River counterpart to *United States v. Washington*, the States, Tribes, and the Federal Government had been taking each other to court over disagreements about how to manage fisheries in the face of ESA constraints. In Puget Sound, additional ESA listings were on the horizon. That was the situation I found when I arrived at WDFW in early 1999.

18. I believed then, and still believe today, that the best way to rebuild sustainable salmon populations is through an integrated, holistic system of stewardship that provides protection and support throughout the salmon's entire life cycle. Fisheries

managers call this "gravel-to-gravel" management, because it extends from the gravel streambeds where salmon first emerge from their eggs as fry, out to the open ocean where the salmon feed and mature to adults, and back to the gravel of the natal streams, where the adult salmon return to spawn and create the next generation. A "gravel-to-gravel" management approach is possible only through collaboration between all the people whose lives are intertwined with the salmon.

19. To enhance that collaboration, one of my top priorities when I came to WDFW was to reestablish a co-manager relationship between WDFW and tribal governments. One of the first things I did when I arrived was to establish a new unit within the Department that is now called the Intergovernmental Resource Management (IRM) group. Its primary mission is to work cooperatively with the Indian Tribes that have federally-secured fishing and hunting rights in Washington, in government-to-government, co-management relationships. I also made organizational changes within WDFW to carry out my philosophy that science should drive decision-making, not the other way around.

20. As of 1999, it was already Washington State policy to take the lead in responding to ESA salmon listings. Human activity that affects salmon survival and recovery has been categorized into "4 H's"—harvest, hatcheries, hydroelectric power, and habitat. As described in the attached testimony that I provided to a Washington State legislative committee in 2004 (Exhibit I), the Washington Legislature adopted several key pieces of legislation over several legislative sessions, beginning in 1998, to address all

four "H's", both in the short term and over the long term. Most of the legislation is currently codified in Chapters 77.85 and 77.95 of the Revised Code of Washington. During my ten years as WDFW Director, my staff and I worked with the fishery co-manager Tribes, including those in *United States v. Washington* and *United States v. Oregon*, state, federal, and Canadian officials, the Washington Legislature, the United States Congress, local governments, and non-governmental groups to implement the legislative policies and improve conditions for wild salmon in all four "H's" throughout Washington State. This work is summarized in guest columns I wrote for the Seattle Post-Intelligencer in 2003 and 2008, both of which are attached (Exhibits J and K).

B. Harvest

21. Fisheries management within the *United States v. Washington* Case Area has changed quite a bit since Judge Boldt issued his injunction in March 1974. Some of those changes occurred before I arrived at WDFW, and some occurred under my direction. WDFW and the Tribes have modified fisheries management to focus more on the needs of individual stocks. We reduced fishing pressure on many wild stocks, allowing a greater percentage to return to the spawning grounds. NOAA Fisheries described some of those changes in a December 2008 Biological Opinion, noting that, while overfishing contributed to declines of Puget Sound Chinook and Hood Canal Summer Chum in the 1980s and early 1990s, state and tribal fishery co-managers have made reforms designed to allow those salmon

populations to rebuild. (See Exhibit D, pages 5-46, 5-60, 5-61, 9-18, 9-19, 9-28; Bates Nos. F0009884, F0009898-99, F0010102-03, F0010112.)

22. To help wild Chinook reach the spawning grounds, WDFW and the Puget Sound Treaty Indian Tribes jointly developed a Resource Management Plan (RMP) for Puget Sound Chinook under the federal Endangered Species Act. The RMP provides the framework under which WDFW and the Tribes manage salmon fisheries that affect Chinook in the greater Puget Sound area. WDFW and the Tribes completed the RMP in 2004 and submitted it to NOAA Fisheries for approval. NOAA Fisheries determined that the RMP is consistent with the federal ESA, concluding that state and tribal harvest would not jeopardize the existence of ESA-listed fish or impede their recovery. Third parties filed a lawsuit challenging that determination, but Judge Lasnik rejected the challenge in *Salmon Spawning & Recovery Alliance v. Lohn*, No C06-1462RSL (W.D. Wash. March 20, 2008). The current RMP will expire in 2010, and WDFW and the Puget Sound Treaty Indian Tribes are already working on a new one.

23. Harvest reform by WDFW and the Treaty Indian Tribes is not enough, however. As shown in Figure 7 of *United States v. Washington* Joint Exhibit 2a, juvenile Chinook salmon from Washington rivers migrate to Canadian and Southeast Alaskan marine waters before reversing their migration and returning to Washington as adults to spawn. People fish for them in those waters. In recent years, between one-third and two-thirds of all Chinook salmon that were harvested in the three major mixed-stock fisheries off the coasts of Southeast

Alaska and British Columbia originated in Washington waters, as depicted in Exhibit L. It is estimated that about one-third of those fish were wild salmon, many listed as threatened or endangered under the federal Endangered Species Act. New data showed that a Chinook agreement negotiated by the United States and Canada in 1999 was not performing as expected. Canadian catches of some U.S.-origin Chinook, primarily from the Lower Columbia River and Puget Sound, exceeded those anticipated by the 1999 negotiators. A lawsuit related to that situation came before this Court, *Salmon Spawning & Recovery Alliance v. Gutierrez*, No. C05-1877RSM (W.D. Wash.).

24. The 1999 U.S./Canada agreement was due to expire at the end of 2008, and at the beginning of 2007 the two countries began negotiating a replacement agreement through the United States/Canada Pacific Salmon Commission. I was appointed to be the Washington and Oregon Commissioner, and I served as the Pacific Salmon Commission Chair in 2007-08. Other people involved in the negotiations with Canada included Ron Allen of the Jamestown S'Klallam Tribe, and representatives from Alaska, Oregon, the Columbia River Treaty Tribes, and federal agencies. In addition, Terry Williams of the Tulalip Tribes and Lorraine Loomis of the Swinomish Tribe were observers at most of the negotiating sessions.

25. In May 2008, after nearly 18 months of negotiations, the Pacific Salmon Commission reached an agreement. The Chinook portion of the agreement is attached, along with a letter of transmittal to the United States and Canadian governments (Exhibit

M). The terms of the agreement require the West Coast Vancouver Island fishery in British Columbia and the Southeast Alaska fishery to reduce their catch of Chinook salmon by 30 percent and 15 percent, respectively, in each year during the 2009-2018 period. The agreement is grounded in science and is designed to be responsive to changes in salmon stock status over time. NOAA Fisheries determined on December 22, 2008 that, if implemented, the agreed-to fishing regimes, in combination with existing Chinook management regimes in Washington, are not likely to jeopardize the continued existence or impede recovery of any threatened or endangered species (Exhibit D). Canada and the United States exchanged diplomatic notes on the following day, and the new agreement entered into force on January 9, 2009. The new agreement and related documents are posted on the Pacific Salmon Commission web site, http://www.psc.org/Index.htm. The agreement is expected to increase the number of wild and hatchery-origin Chinook salmon returning to Washington, giving state and tribal fishery managers in the *United States v. Washington* Case Area more latitude when planning fisheries on hatchery Chinook while protecting wild Chinook. We should begin to see those effects in 2009 fisheries, before the trial in this Subproceeding commences. Most importantly, the new agreement will help fishery managers to meet the recovery exploitation rates for most wild Puget Sound Chinook stocks.

26. NOAA Fisheries has also predicted that, for most Puget Sound Chinook stocks, the new agreement with Canada is likely, in varying degrees, to boost the number of wild Chinook that reach the

spawning grounds. (See Exhibit D, pages 7-67, 7-78, 7-88; Bates Nos. F0010017, F0010028, F0010038.) That will allow the fish to explore unused habitat, expand existing spawning areas, and pioneer new spawning grounds.

27. It will take money to implement the new Pacific Salmon Treaty agreement. The agreement specifies that the United States shall make available up to $37.5 million to invest in scientific support and to ease the pain of fishery reductions in Canada. The United States negotiators, including the Tribes, are also asking Congress for an additional $30 million over ten years to pay for hatchery and habitat projects designed to improve the status of Dungeness, Nooksack, Skagit, Stillaguamish, and Snohomish Chinook stocks from the *United States v. Washington* Case Area. An additional $30 million is being requested to ease the economic impact of reducing fisheries in Southeast Alaska. In September 2008, January 2009, and March 2009 I traveled to Washington, D.C., to seek such funding, along with tribal representatives from Puget Sound and the Columbia River and representatives from the States of Alaska and Oregon.

28. The tables and other information in NOAA Fisheries' December 2008 Biological Opinion on the new Pacific Salmon Treaty agreement suggest that our harvest reforms and other measures are bearing fruit. Information provided by the Tribes and WDFW shows that salmon abundance and escapement of Puget Sound Chinook and Hood Canal Summer Chum stocks is generally trending upward, although NOAA Fisheries cautions that increased escapements of wild adults may be affected by the

presence of hatchery origin Chinook. (Exhibit D, Table 5.1.4.1-4 and Figure 5.2.1.1-2, pages 5-51 and 5-62, Bates Nos. F0009889 and F009900.)

29. A new report from the Washington Governor's Salmon Recovery Office is also encouraging. The *2008 State of Salmon in Watersheds* report considered the abundance of wild Chinook in the Puget Sound Salmon Recovery Region by comparing pre-ESA listing years with post-ESA listing years. Overall, the abundance and escapements of wild Chinook across the region and within the major population groups showed increases, though some groups are not doing as well as others. (See Exhibit E, pages 35 and 37; Bates Nos. F0013139 and F001341.) As NOAA Fisheries has put it, however, "Survival and recovery of the Puget Sound Chinook Salmon ESU will depend, over the long term, on improvements in habitat conditions, and reductions in the effects of hatcheries, in addition to the harvest reforms that have been and are being implemented." (Exhibit D, page 5-52; Bates No. F0009890.)

C. Hatcheries

30. Hatcheries produce the vast majority of the salmon harvested in the Pacific Northwest, generating significant economic, recreational and cultural benefits for the State of Washington, including the Treaty Tribes. For example, 60 to 70 percent of the Chinook caught in Puget Sound-area fisheries currently are of hatchery origin. But hatchery fish can also pose risks to wild fish, ranging from genetic mixing to competition for food. That has sparked an ongoing series of reforms, designed to

prevent hatchery fish—and the facilities that produce them—from interfering with wild salmon, while providing increased catches in tribal and non-tribal fisheries.

31. In Fiscal Year 2000, Congress appropriated funds to establish the Puget Sound and Coastal Washington Hatchery Reform Project. Its goals are to use science to reform hatcheries so that they will conserve wild salmon and steelhead populations while supporting sustainable tribal and non-tribal fisheries. An independent group of scientists, the Hatchery Scientific Review Group (HSRG), was established to provide guidance to policymakers and hatchery managers based on the best available science. Some of the scientists are current or retired employees of WDFW, some are affiliated with *United States v. Washington* Indian Tribes, and some work for federal agencies.

32. Between 2001 and 2003, the HSRG reviewed more than 200 state, tribal, and federal hatchery programs at over 100 hatcheries in the Puget Sound and Washington Coastal regions. In 2004, the HSRG published a report containing over 1,000 recommendations for change at individual hatcheries, along with 18 recommendations to be applied across the entire system. State, tribal, and federal hatchery managers have taken steps to implement the recommendations, and have developed databases to track the status of each one. Since 2004, WDFW and the Tribes have addressed more than 800 of the HSRG's recommendations.

33. In response to the HSRG recommendations, WDFW and the *United States v. Washington*

Tribes have discontinued several hatchery programs and have retooled others so that they will support, not degrade, naturally-spawning salmon and steelhead populations. An example is a plan that WDFW and the Tulalip Tribes jointly developed to restructure hatchery runs returning to the Tulalip Tribes' hatchery on Tulalip Bay. WDFW and the Tribes have also made infrastructure changes in their hatchery programs. For example, WDFW and the Stillaguamish Tribe have collaborated in making improvements at facilities on the Stillaguamish River.

34. All of this takes money, and many of the hundreds of HSRG recommendations that remain to be implemented are the ones that are the most costly and time-consuming. Cost estimates for capital (large construction) funds range between $100 and $150 million to accomplish the HSRG-recommended reforms at state hatcheries in the Puget Sound region alone. Another $5 to $10 million in state operating funds are also required. As of December 2008, planned renovations at WDFW's Voights Creek Hatchery in the Puyallup watershed were expected to cost about $16 million to meet HSRG recommendations and bring the hatchery up to current water quality standards. Because recent winter flooding has caused additional damage, creating additional costs, WDFW has proposed to close the Voights Creek facility altogether, with resulting loss to fisheries. Funding for reforms at all state, tribal, and federal hatcheries has been slow to materialize, and is lagging behind funding for other salmon recovery efforts.

D. Hydroelectric Power

35. With respect to their effect on Washington salmon, hydroelectric power dams get the most public attention in the Columbia River Basin, but they have a role for salmon in the *United States v. Washington* Case Area, as well.

36. The Baker River, a tributary to the Skagit River, has two hydroelectric dams that are currently operated by Puget Sound Energy under a license from the Federal Energy Regulatory Commission. As the expiration date of the original 1956 license neared, Puget Sound Energy negotiated with WDFW, the Upper Skagit, Swinomish, and Sauk-Suiattle Tribes, the Northwest Indian Fisheries Commission, and others over the terms of a new one. The parties reached agreement, and in October 2008 the Federal Energy Regulatory Commission approved the new license with the terms they had negotiated. The new license includes provisions for improved salmon propagation facilities, better management of water flows for fish, means for getting fish past the dams, in-river fish habitat enhancement with gravel and woody debris, and strategies for controlling shoreline erosion. These measures are expected to increase salmon production, primarily sockeye, from the Baker River.

37. When I arrived at WDFW, a small dam on Goldsborough Creek, in Mason County, blocked fish passage to 14 miles of excellent habitat. Goldsborough Dam had been built in 1921 to supply power to the City of Shelton, but it was no longer being used for any purpose. It was identified as a good candidate for removal because of the anticipated fish

benefits relative to the cost of removal. In 2001, after years of planning, Goldsborough Dam was removed in a $4.8 million project that involved WDFW, the Squaxin Island Tribe, the United States Army Corps of Engineers, Simpson Timber Company, and others. In 2007, the Squaxin Island Tribe reported that 41,200 out of 42,172 juvenile coho migrating out of the creek came from the area upstream of the old dam site.

38. Negotiations and studies about making some small dams in Western Washington more fish-friendly are underway in connection with proceedings before the Federal Energy Regulatory Commission. Examples include the Jackson Project on the Sultan River in the Snohomish River Basin and the Morse Creek Project near Port Angeles. Tribes are involved in both matters. Two large fish-blocking dams in the *United States v. Washington* case area are slated for removal, the Elwha and Glines Canyon Dams on the Elwha River in Olympic National Park. Removal is expected to cost hundreds of millions of dollars.

E. Habitat

39. As part of the package of salmon recovery legislation that it enacted in the late 1990s, the Washington Legislature established a process under which regional salmon recovery organizations could form and develop regional salmon recovery plans. Seven regional salmon recovery organizations have been formed, three of them within the *United States v. Washington* Case Area. Six regional recovery plans have been submitted to and approved by NOAA Fisheries. Two of them were developed for parts of the *United States v. Washington* Case Area: The Puget

Sound Salmon Recovery Plan, and the Hood Canal Chum Recovery Plan. The Governor's Salmon Recovery Office has prepared a summary of these plans (attached as Exhibit N), and their status as of the end of 2008 (attached as Exhibit E). The *United States v. Washington* Tribes and WDFW were involved in the development of both plans, co-authoring the Skagit Chinook section of the Puget Sound plan. NOAA Fisheries adopted both plans, with additions, in 2007. The Tribes and WDFW are also involved in the development of a recovery plan for Lake Ozette sockeye, and in the discussions about the development of a recovery plan for Puget Sound steelhead.

40. Most locally-developed recovery plans include provisions for all four "Hs," but habitat may be their greatest strength because that is where local communities and property owners can do the most. The Puget Sound Salmon Recovery Plan, which is expected to take 50 years to implement, takes an ecosystem approach within 14 local watersheds. Actions to be implemented include estuarine restoration, nearshore habitat restoration, floodplain restoration, streamside riparian habitat restoration, measures to create better water flow conditions for fish and clean up pollution—and fish passage barrier correction.

41. In 1999, the Washington Legislature established the Washington State Salmon Recovery Funding Board (SRF Board), one of the boards supported by the Recreation and Conservation Office where I currently work. While I was WDFW Director, a member of my staff served as a non-voting member on the SRF Board under my direction. The voting

members of the SRF Board include a representative from one of the *United States v. Washington* Tribes. The Salmon Recovery Funding Board makes grants for salmon habitat projects and other salmon recovery activities. The SRF Board has set up procedures and criteria for making annual funding awards in order to allocate funds fairly across the state in a manner that will provide the most benefit to salmon. Applicants compete for the awards. Since 2000, the SRF Board has funded 430 projects in the Puget Sound Region, totaling more than $131 million. Grant recipients have provided nearly $84 million in matching funds, for a total investment of more than $215 million. During the same period, the SRF Board has funded 80 projects in the Hood Canal Region totaling more than $24 million. Grant recipients have provided nearly $19 million, for a total investment of $42.3 million. In both regions, habitat restoration, including culvert replacements, represents about 50% of the expenditures. Some of the money comes from state funding sources, and some of it comes from the Pacific Coastal Salmon Recovery Fund (PCSRF) established by Congress. Some $233 million of federal PCSRF monies have been distributed in Washington State in accordance with a Memorandum of Understanding between the SRF Board and NOAA Fisheries, which requires a minimum of 25% in non-federal matching funds.

42. Indian Tribes are eligible for and have received SRF Board grants. Some of the projects for which the Tribes have sought funding have involved culvert inventory or repair, but others have not. Illustrating our shared strategy of gravel-to-gravel stewardship that takes into account all aspects of a

salmon's life, the Tribes have sought and been granted funding for projects to restore estuaries and side channels, and to enhance stream habitat by adding large woody debris and riparian vegetation. WDFW and the Washington State Department of Transportation have been involved with the Jamestown S'Klallam Tribe and others in a multi-year, multi-million dollar effort to restore Jimmycomelately Creek and the Lower Sequim Bay Estuary, with partial funding from the SRF Board. That project is expected to help in the recovery of Hood Canal Summer Chum salmon. See Exhibit N (Bates No. F0004340).

43. Local non-profit groups called Regional Fisheries Enhancement Groups (RFEGs) are also eligible for SRF Board grants. The Washington Legislature authorized the creation of Regional Fisheries Enhancement Groups in 1989. Additional legislation during the 1990s made RFEGs eligible for state and federal funding for salmon habitat enhancement and restoration projects. RFEGs have also obtained private funding. Fourteen RFEGs have been formed, including nine in the *United States v. Washington* Case Area. WDFW provides administrative and technical support. Staff from several *United States v. Washington* Tribes serve on RFEG boards, and RFEGs and Tribes have worked together on many projects, including fish passage barrier removal projects. The Regional Fisheries Enhancement Group Program Annual Report for 2006-07 (excerpts attached as Exhibit O) states that, over a period of twelve years, RFEGs had fixed 600 fish passage barriers and opened up 650 miles of fish habitat. Most of those projects were on private lands.

44. Degraded estuarine conditions have been identified as a major factor limiting salmon recovery in Puget Sound. (See Exhibit E page 33, Bates No. F0013137, and Exhibit N, Bates No. F0004332.) To address it, large-scale estuary-restoration projects are now underway in the Nisqually River Delta, the Skagit River Delta, and in the Skokomish River Delta in Hood Canal. A brochure that the United States Fish and Wildlife Service published about the restoration of the Nisqually River Delta is attached (Exhibit P). Because people recognized the importance of these projects, they put aside other salmon recovery projects to make sure these got started. The Nisqually, Swinomish, Upper Skagit, Sauk-Suiattle, and Skokomish Tribes have played a major role in the effort.

45. A related problem in Puget Sound is degraded nearshore conditions. (See Exhibit E page 33, Bates No. F0013137, and Exhibit N, Bates No. F0004332.) An estimated 80% of the Puget Sound nearshore is no longer functional for salmon. Under my direction, WDFW joined with the United States Army Corps of Engineers in 2001 as the necessary non-federal sponsor, and then added others to convene the Puget Sound Nearshore Partnership. Its mission is to build and implement an ecosystem-based restoration strategy for the badly-damaged nearshore environment of Puget Sound. We were joined by other state and federal agencies, local governments, the Northwest Indian Fisheries Commission, tribal governments, businesses, and others. The Partnership has sponsored a multi-million-dollar study of the function of the nearshore environment. The results are being used to identify

restoration and protection actions across 2,500 miles of the Puget Sound nearshore. The Corps of Engineers is expected to use the information to advance large-scale projects beyond the existing capacity of regional programs and authorities.

46. Beginning in 2006, the Washington State Legislature has appropriated funds for Estuary and Salmon Restoration in Puget Sound to assist the work of the Puget Sound Nearshore Partnership. More than $20 million has been granted to dozens of projects that will provide 3,500 acres of restored habitat spanning all ten Puget Sound counties. Recipients have included the Lummi, Swinomish, Tulalip, and Nisqually Tribes.

47. Salmon habitat restoration is a priority regionally as well as in Washington State. During the 1990s, it became clear to Canadians and Americans that their shared Pacific Northwest salmon runs could not be restored to optimum production through fishing restrictions alone. Recognizing the need to address non-fishing factors, Canada and the United States added a "Habitat and Restoration" provision to the Pacific Salmon Treaty in 1999 (attached as Exhibit Q). It emphasizes the importance of protecting and restoring salmon habitat and water quality as well as restricting fisheries, and thus directs the Pacific Salmon Commission to examine non-fishing factors that affect salmon production. In 2006, the Commission agreed to establish a Habitat and Restoration Technical Committee to do that work (Exhibit R). The Commission is currently developing a charter for that committee.

48. In 2007, the Pacific Salmon Commission directed an Ad Hoc Habitat Scoping Committee to prepare a report on the salmon habitat activities carried out by Canada and the United States since 1999. I co-chaired that committee, which also included members from the Columbia River Intertribal Fish Commission. We produced a report, which is attached as Exhibit S. It describes the variety of habitat restoration efforts in both countries, featuring some case studies. One of those is the Skagit River Estuary Restoration at Deepwater Slough, a joint project of the Swinomish and Sauk-Suiattle Tribes, WDFW, and the United States Army Corps of Engineers. It is designed to increase habitat for juvenile Chinook salmon, and, according to tribal monitoring data, it appears to be successful. Another case study is the removal of Goldsborough Dam described above in Paragraph 37.

49. The 1999 revisions to the Pacific Salmon Treaty also set up two endowment funds to be used for habitat restoration and other projects in the United States and Canada. Monies from the Southern Boundary Restoration and Enhancement Fund, or "Southern Fund," have been distributed to Tribes, Regional Fisheries Enhancement Groups, WDFW, and other organizations. Between 2004 and 2008, the Southern Fund distributed nearly $5.5 million in grants for projects in Washington and Oregon, including nearly $1 million to *United States v. Washington* Tribes and tribal organizations for projects such as the Nisqually Estuary Restoration, and for salmon stock assessments in northern Puget Sound. No distributions will be made in 2009, however. The Southern Fund is not immune from the

current global economic downturn, and the value of its corpus has fallen below the original invested amount.

50. In 2007, the Washington Legislature created the Puget Sound Partnership, whose mission is to restore the Puget Sound ecosystem to health by 2020, and to implement the Puget Sound Salmon Recovery Plan. In December 2008, the Puget Sound Partnership released an Action Agenda that the Puget Sound Tribes helped to develop. The focus of the Action Agenda is broad. It proposes actions to protect and preserve the natural functions that we still have in the Puget Sound region, restore what we can, and reduce sources of water pollution. The Action Agenda identifies dozens of state, tribal, local, federal, and Canadian entities with a role in implementing the actions, and it includes a funding strategy. These efforts have the goal of a healthier Puget Sound that can produce and sustain more juvenile salmon and other creatures.

III. Coupling Habitat Restoration with Hatchery and Harvest Reform: A Successful Model for Healthy Salmon and Sustainable Fisheries

51. In my opinion, wild salmon can thrive on a sustainable basis only if we support them through their entire lifecycle, in a "gravel-to-gravel," science-based approach to recovery. The public's financial resources are limited, and I have already observed "salmon funding fatigue" among Congressional staffers. In my opinion, it would be a mistake to focus narrowly on only one factor affecting salmon, such as state-owned fish-blocking culverts. If juvenile salmon cannot find functional shelter in the estuary as they

adapt to salt water, they die—as was determined for the Skagit River. If they cannot find cool, unpolluted freshwater for migration and spawning, they die—as was determined for the Fraser River. If adult salmon are caught in excessive rates, the stock will not recover—as was determined for the Nooksack spring Chinook. If hatchery-origin salmon spawn at excessive rates with wild fish, the stocks suffer genetic harm. Fixing state-owned culverts alone will do little to solve these other, very real, bottlenecks to recovery.

52. Nor will fixing state-owned culverts alone sustain salmon fisheries, tribal or non-tribal. I believe that an ESA-compliant federal, state, and tribal hatchery system will be the backbone of any strategy for maintaining or increasing Chinook catches in the Puget Sound region. We cannot achieve that without funding for hatchery reform. The alternative is to cut hatchery production, with resulting cuts in fisheries. Fishermen can take nearly 100% of hatchery-origin Chinook, but future harvest rates even on healthy stocks of wild Chinook may not exceed 20-40% for many recovered stocks. We can never return to the excessive 60-80% wild harvest rates that helped put Puget Sound Chinook on the threatened species list, no matter how many culverts are fixed.

53. Within the habitat arena, culverts are not even on the list of major factors limiting Hood Canal Summer Chum salmon recovery (see Exhibit N, Bates No. F0004338). Even so, statewide, we have made more and faster progress in fixing fish passage barriers than we have in addressing other major habitat factors that affect salmon, thanks in part to the hard work of local watershed groups (Exhibit E,

pages 24, 29; Bates Nos. F0013128, F0013133). We have already fixed the easiest and cheapest fish passage barriers, and those that remain will be more difficult and expensive. In my opinion, our goal should be to address all factors on parallel tracks to the extent we can, including fish passage barriers. If we funnel inordinate amounts of money into fixing state-owned culverts while ignoring how they fit into the whole picture of the salmon life cycle, we will surely create choke points in other places, possibly prolonging salmon recovery.

54. Our experience in the Columbia River shows that spending money on only one or a few factors affecting salmon leads to failure. Billions of dollars have been spent on fish and wildlife restoration in the Columbia River Basin. Despite these expenditures, the abundance of wild salmon and steelhead populations has not recovered to the target goals set by the Northwest Power and Conservation Council. The Hatchery Scientific Review Group (HSRG), which recently completed its review of Columbia River Basin hatchery programs, has urged a holistic salmon recovery approach. In its analysis of Lower Columbia River Coho, the HSRG concluded that the benefits of habitat improvements would more than double if combined with hatchery reforms. Unless hatchery and harvest reforms are implemented, the potential benefits of current or improved habitat cannot be fully realized. (Exhibit T page 5; Exhibit U page 13.)

55. The new Chinook agreement between the United States and Canada (Exhibit M) recognizes the need for a broad, integrated approach to salmon recovery in both countries. It states that "successful

Chinook conservation, restoration, and harvest management depends on a sustained and [internationally] coordinated program of resource protection, restoration, enhancement and utilization." In agreeing to set up a joint Habitat and Restoration Technical Committee (Exhibit R), the United States and Canada have promised to work together in planning how to integrate all factors necessary to help salmon survive and thrive in the *United States v. Washington* Case Area and regionally.

56. As shown in the attached "H-integration" diagram (Exhibit V), everything is connected when it comes to salmon. In the past, poor land use degraded habitat, and the wild salmon declined. Hatcheries were built to replace both. People who caught the more abundant hatchery fish took too many wild fish, and the wild salmon declined some more. Uncaught hatchery fish crowded the spawning grounds, and the outcompeted wild salmon declined still more. The gravel-to-gravel cycle was broken. My vision for the future is to reconnect the pieces. In restored freshwater and estuarine habitats, wild salmon will increase, and hatcheries will function as nurseries for wild salmon. Fisheries will target hatchery-origin fish while sparing wild fish. Wild salmon will thrive on the spawning grounds. The wild salmon will be healthy, and fisheries, catching both hatchery-origin and wild salmon, will be sustainable. Only if we reconnect all of the pieces in the gravel-to-gravel cycle can that happen.

57. We are reconnecting those pieces in the *United States v. Washington* Case Area. The integrated, collaborative, bottom-up salmon recovery approach we now have in place is the first time such

an approach has been tried, thanks in large part to the close working relationship between WDFW and the Tribes. While this Subproceeding has been pending, WDFW, the Tribes, other state agencies, local governments, citizen groups, and individuals have expended countless hours developing ecosystem-focused, science-based strategies to increase the number of salmon available in fisheries in the *United States v. Washington* Case Area. A lot of money has already been well spent as we are beginning to see signs of success. As NOAA Fisheries has cautioned, however, "the most pervasive risks to improved status of listed salmon require long and difficult efforts to correct, and many actions geared toward reducing the likelihood of extinction still require relatively long periods of time for their positive effects to become noticeable." (Exhibit D, page 5-45; Fates No. F0009883.) The integrated strategies we have developed and thus far funded to address the complete life-history of wild salmon will take decades to fund and fully implement throughout the *United States v. Washington* Case Area. In my opinion, they should continue to be given the chance to build healthy fish populations and sustainable fisheries.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on this *31st* day of March, 2009, at Olympia, Washington.

s/Jeffrey P. Koenings
JEFFREY P. KOENINGS, PH.D.

EXHIBITS TO THE DECLARATION OF JEFFREY P. KOENINGS, Ph.D

Exhibit A
Resumé of Jeffrey P. Koenings, Ph.D.

Exhibit B
Cover page, Section 1.1, and Figures 7 and 8 from *United States v. Washington* Joint Exhibit 2a, *Joint Statement Regarding the Biology, Status, Management, and Harvest of the Salmon and Steelhead Resources of the Puget Sound and Olympic Peninsular Drainage Areas of Western Washington* (May 14, 1973)

Exhibit C
Excerpt from the *Washington Statewide Strategy to Recover Salmon: Extinction is Not An Option—Summary* (State of Washington Governor's Salmon Recovery Office, September 1999) (Cover pages and pages II.11 – II.21; Bates Nos. H00002844 - H00002846 and H00002863 – H00002873)

Exhibit D
Endangered Species Act Section 7(a)(2) Consultation Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation: Consultation on the Approval of Revised Regimes under the Pacific Salmon Treaty and the Deferral of Management to Alaska of Certain Fisheries Included in those Regimes (National Marine Fisheries Service, December 22, 2008) (Bates Nos. F0009795 – F0010216)

Exhibit E
Excerpt from 2008 State of Salmon in Watersheds: Salmon Recovery Act 10th Anniversary (State of Washington Governor's Salmon Recovery Office,

2009) (Bates Nos. F0013103 – F0013157 and F0013197 – F0013202)

Exhibit F
Salmonid Stock Inventory 2002 Summary Tables for stocks originating from the *United States v. Washington* Case Area and Willapa Bay (Washington Department of Fish and Wildlife 2002)

Exhibit G
Declaration of Keith Lutz in Support of Tribes' Motion for Summary Judgment (*United States v. Washington* Doc. No. 18564; Subproceeding 01-1 Doc. No. 299)

Exhibit H
Testimony of Jeffrey P. Koenings, Ph.D., Director, Washington Department of Fish and Wildlife, to the United States Senate Commerce, Science and Transportation Committee Field Hearing, Seattle, Washington, May 27, 2008 (Bates Nos. F0013264 – F0013270)

Exhibit I
Testimony to the Washington State House of Representatives Capital Budget Committee, January 22, 2004, by Bill Ruckelshaus, Chair, Salmon Recovery Funding Board, Jeff Koenings, Director, Washington State Department of Fish and Wildlife, and Bob Nichols, Senior Advisor, Office of the Governor (Bates Nos. F0013256 – F0013263)

Exhibit J
Jeffrey Koenings, *Fish Recovery Needs State Nurture Not Just Mother Nature*, Seattle Post-Intelligencer, April 27, 2003 (Bates Nos. F0013253 – 0013255)

Exhibit K
Jeffrey P. Koenings, Ph.D., *Salmon Recovery Comes of Age*, Seattle Post-Intelligencer, December 12, 2008 (Bates Nos. F0008269 – F0008271)

Exhibit L
Pie charts showing *Average Annual Chinook Catch Size & Composition, 2002-2006; Number of Chinook, by Pacific Salmon Treaty Management Area*

Exhibit M
Pacific Salmon Commission final agreement regarding Annex IV, Chapter 3 Chinook, to the Pacific Salmon Treaty, with letter of transmittal to the governments of the United States and Canada (May 21, 2008)

Exhibit N
Excerpts from *Statewide Strategy to Recover Salmon: Responding to Federal Endangered Species Act Listings "The Washington Way"* (State of Washington Governor's Salmon Recovery Office, 2006) (Cover page and pages 12-21; Bates Nos. F0004318, F0004331 – F0004340)

Exhibit O
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No. 17-269

In The
Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.

Respondents.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

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PETITION FOR CERTIORARI FILED AUGUST 17, 2017
CERTIORARI GRANTED JANUARY 12, 2018

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Streams

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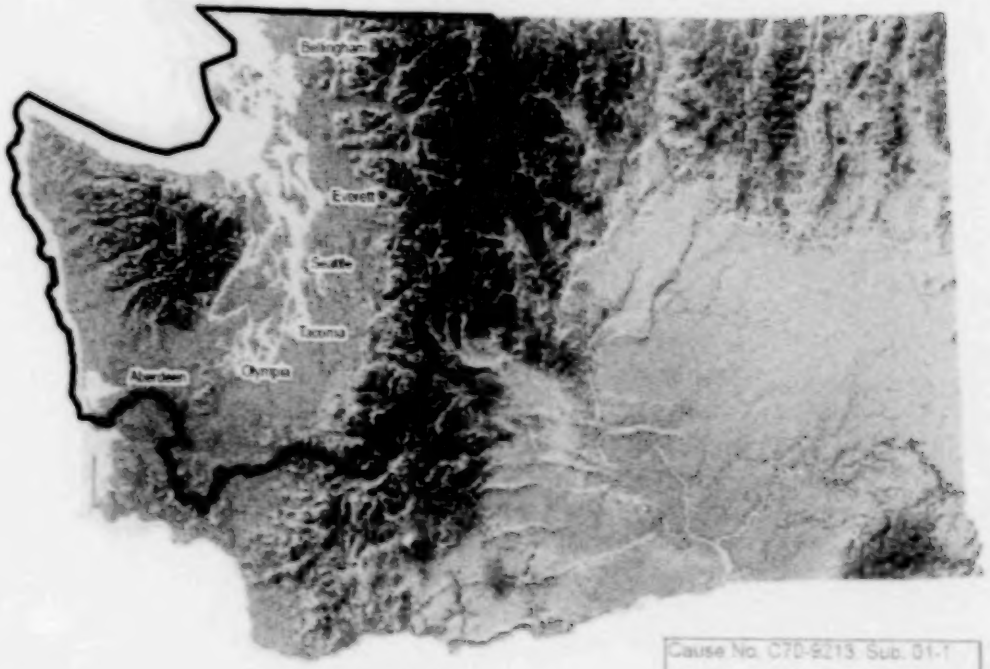
N
W E
S

0 0.5 1 1.5
Miles

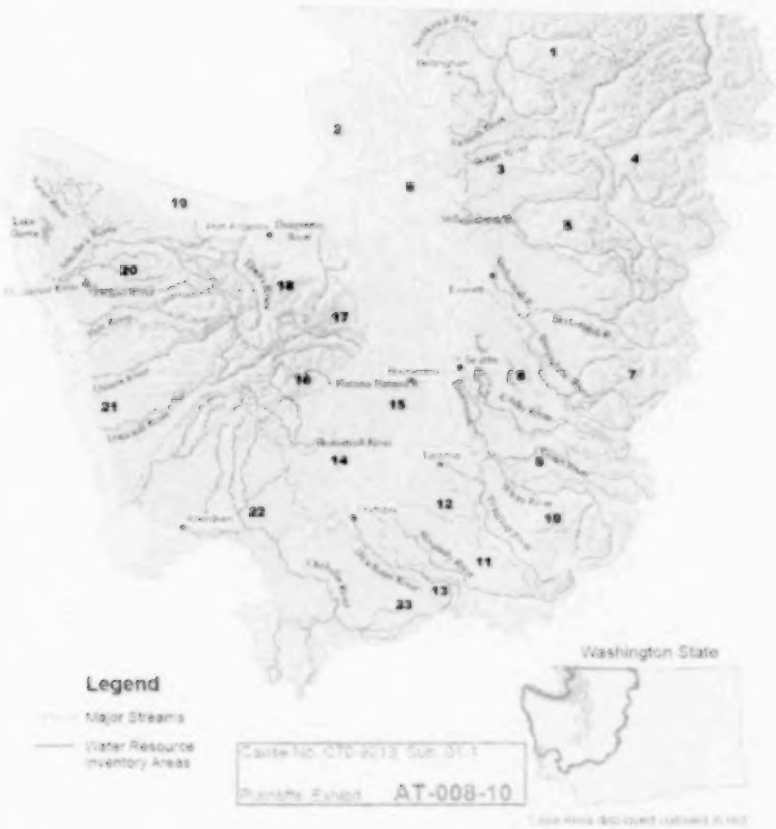
United States v Washington Case Area



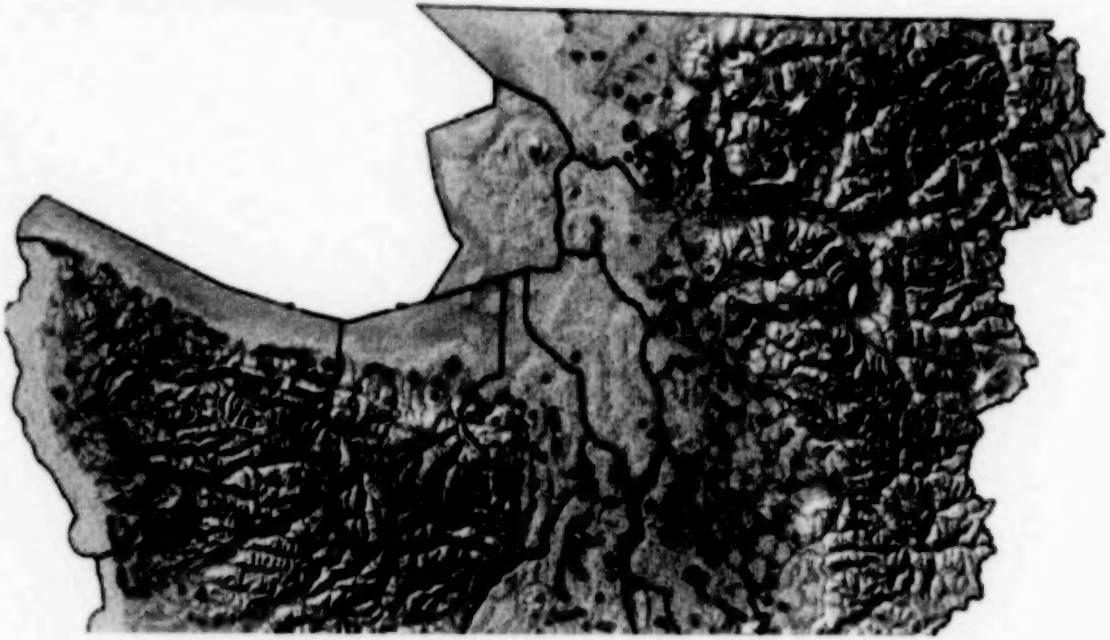
Cause No. C70-9213, Sub. 01-1

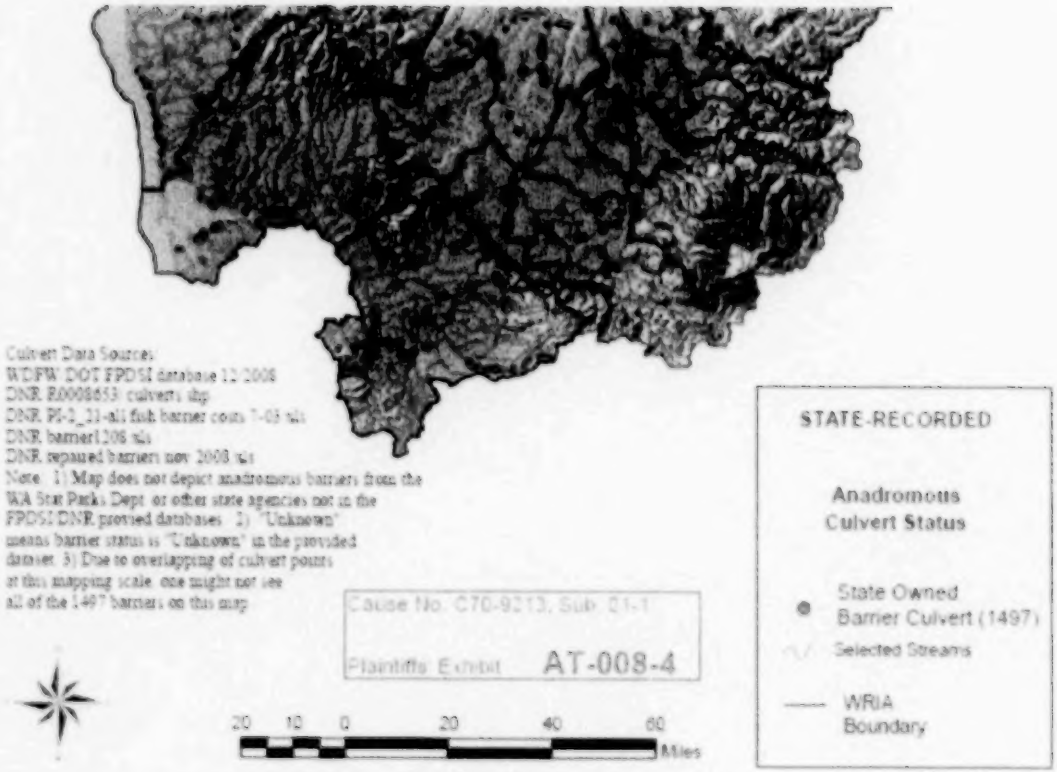
Plaintiffs' Exhibit AT-008-9

Water Resource Inventory Areas 1 - 23



Washington State Barrier Culverts in U.S. v. WA. Case Area




Culvert Data Sources:
WDFW DOT FPDSI database 12/2008
DNR R0008653 culverts.shp
DNR PI-2_21-all fish barrier costs 7-03 xls
DNR barrier1208 xls
DNR repaired barriers nov 2008 xls
Note: 1) Map does not depict anadromous barriers from the WA Stat Parks Dept. or other state agencies not in the FPDSI/DNR provied databases. 2) "Unknown" means barrier status is "Unknown" in the provided dataset. 3) Due to overlapping of culvert points at this mapping scale, one might not see all of the 1497 barriers on this map.
Cause No. C70-9213, Sub. 01-1
Plaintiffs' Exhibit AT-008-4
20 10 0 20 40 60
Miles
STATE-RECORDED
Anadromous Culvert Status
State Owned Barrier Culvert (1497)
Selected Streams
WRIA Boundary

2859a

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The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF PAUL SEKULICH, PH.D., IN LIEU OF DIRECT TESTIMONY

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I, PAUL SEKULICH, Ph.D., declare as follows:

1. I am a fisheries biologist with over thirty years of professional experience in salmon habitat and fisheries issues in the State of Washington. My Curriculum Vitae is attached as Exhibit A.

2. I hold a Bachelor of Science in Fishery Biology from Colorado State University. After military service, I returned to that university and earned a Master of Science in Fishery Biology. In 1980, I completed the requirements for a Doctor of Philosophy degree in Forestry Science-Fisheries at

the University of Idaho. For my doctoral dissertation, I analyzed factors affecting the carrying capacity of Idaho forest streams for rearing juvenile chinook salmon. My dissertation has been cited by other state, tribal, and federal scientists studying salmon in Idaho.

3. I joined the Washington Department of Fisheries (WDF) in 1977. For two years, I worked as a Fish Biologist with progressively greater responsibility managing treaty Indian and non-Indian salmon net fisheries in Puget Sound. In 1979, I was promoted to Assistant Chief of the Harvest Management Division in the WDF Planning, Research, and Harvest Management Program. I held that position for over 11 years. I oversaw salmon fisheries management in Puget Sound. My staff and I worked through some difficult issues as we learned how to manage fisheries in accordance with court orders in *United States v. Washington*.

4. In 1991, I moved from salmon harvest management into salmon habitat work. I spent 12 years supervising the Environmental Restoration Division in what is now the Washington Department of Fish & Wildlife's (WDFW's) Habitat Program. My staff included environmental engineers, biologists and construction workers who specialized in salmonid habitat. We planned, constructed, and evaluated fish habitat projects across the state, and provided technical assistance to support state, local, and federal initiatives to maintain and restore wild salmonids and their habitat. More specifically, we planned and built fish habitat enhancement and restoration projects, inventoried and removed stream obstructions and unscreened water diversions,

inspected and maintained fishways and screened water diversions, developed and maintained a statewide fish passage and water diversion database, and conducted research.

5. I retired from state service in December 2002. I am still involved in salmonid habitat issues, however. Since April 2005 I have worked as a private contractor with WDFW and the Washington State Department of Transportation in matters involving fish passage and other environmental problems affecting salmonids in Washington State.

I. Fish Passage in Washington Before 1990

6. Under Washington State law, RCW Chapter 77.55, anyone who undertakes a construction project in state waters must obtain a hydraulic project approval (HPA) from WDFW. Under RCW 77.57.30, an obstruction in a stream must be provided with a fishway, or fish passage device, approved by WDFW. The HPA law has been on the books since 1943; the fish passage law has been around since the nineteenth century. Before 1990, however, WDFW and its predecessors had no formal program linking HPA applications with fish passage barriers. Staffing levels were sufficient to process HPA applications but not to promote the program. Field habitat biologists who noted fish passage barriers reported them to the Olympia office. Only the most obvious fish passage problems, such as "perched" culverts with large outfall drops, were recorded. Gradually, a database called "Unresolved Fish Passage Problems" was developed. Biologists also conducted yearly inspections of fishways they knew about, and kept a separate database to help them track the owners' compliance

with maintenance directives. Neither of these databases was comprehensive.

II. Systematic Culvert Inventories and Correction Projects Began in the Early 1990s

7. In 1990, WDFW began taking a more systematic approach to hydraulic project approvals and fish passage. Because highways cross streams and other water bodies, HPAs are usually required for highway construction and maintenance projects. State law also requires that highway culverts be passable to fish. It became apparent that we could be more efficient, and do a better job of protecting fish, if we put those two things together. My predecessors, and staff at the Washington State Department of Transportation (WSDOT), decided to incorporate fish passage into our planning on HPAs issued for WSDOT activities. As a result, the agencies executed a Memorandum of Understanding in 1990 (Exhibit B). Among other things, they agreed to conduct an inventory of fish passage barriers on WSDOT rights-of-way. The 1991 Washington Legislature appropriated funds for WSDOT to remove six known fish passage barriers, and to work with what is now WDFW to identify additional fish passage barriers and prioritize them for removal (Exhibit C). Later that year, WSDOT and the Washington Department of Fisheries executed a second agreement to perform a statewide fish passage inventory and develop plans to remove fish passage barriers (Exhibit D). Nearly two decades later, WDFW and WSDOT continue to work together to identify fish passage barriers in the state highway system, prioritize them for correction, and fix them.

8. In nearly every year beginning in 1992, WSDOT and WDFW have published progress reports describing their fish passage barrier inventory and correction work on state highways. I was involved in preparing those that were published before I retired in December 2002, eleven reports in all. The Tribes cited our first three reports in Paragraph 3.6 of their January 2001 Request For Determination that started this Subproceeding.

9. We knew that WSDOT culverts were not the only ones that block fish passage. During the early 1990s, WDFW also reached out to local governments to help them with fish passage problems on their roads. WDFW conducted or helped with culvert inventories in four counties within the *United States v. Washington* Case Area—Jefferson, Thurston, Skagit, and Kitsap—and fixed several high priority county culverts under a cost-sharing arrangement. WDFW also did other cooperative fish passage work with several other counties in Western Washington.

10. Because fish get the most benefits when all fish passage barriers in a watershed are fixed at the same time, WDFW sought to include nearby private fish passage barriers within the same construction project when it fixed state and county culverts. Our ability to do that was limited by financial and staffing resources, however.

11. As we gained experience in fish passage work during the early 1990s, we developed a plan for sequencing the work that is still used today by WDFW: (1) Find and evaluate the culverts that block fish passage; (2) Record the information in a database; (3) Prioritize the culverts for correction so as to get the

most "bang for the buck;" (4) "Scope" each correction project; that is, evaluate the site and possible fish passage solutions; (5) Design a suitable structure that will achieve fish passage; (6) Install it; and (7) After construction, monitor it to see whether it worked.

III. Finding, Prioritizing, and Fixing Culverts that Block Fish Passage

A. Inventory: Finding and Evaluating Culverts that Block Fish Passage

12. In accordance with the 1991 legislation about WSDOT culverts (Exhibit C) and the newly-executed agreements between WSDOT and WDF (Exhibits B and D), the Washington Department of Fisheries organized a new fish passage inventory section to conduct a systematic inventory on WSDOT rights-of-way. It started its work in 1991 under my supervision.

13. When the WSDOT culvert inventory got started in 1991, the Washington Departments of Fisheries and Wildlife were separate agencies. Fisheries was in charge of salmon. Wildlife was in charge of steelhead and most other fish that live in fresh water. Because Fisheries was conducting the culvert inventory, it looked only for barriers to salmon passage. At that time, streams with a gradient of more than 7% were considered too steep for salmon, so WDF did not look for culverts in streams steeper than that. In 1994, the two agencies merged into a single Washington Department of Fish and Wildlife (WDFW). After that, culvert inventories expanded to include all salmonids, not just anadromous salmon. First, in 1995, the inventories expanded to include steelhead by going to steeper stream gradients, up to

12%. Then, in 1998, when the Washington Forest Practices Board drafted new forest practices rules, the inventories expanded again to include nonanadromous, "resident" fish that live in steeper streams up to a 20% gradient.

14. As described in the first report that WDF and WSDOT published on the WSDOT culvert program (excerpts attached as Exhibit F), the culvert inventories started in the north central Puget Sound region. To decide the order in which the inventory crews would visit regions around the state, we looked at the number of road miles in each region, the number of expected stream crossings, the number of fish species present, and fish stock status. These inventories are "road-based." Using stream maps, highway maps, and their own eyes, two people in a truck drive the roads and look for streams and culverts, stopping when they arrive at a likely location. It can be dangerous when there is a lot of traffic and no shoulder. Crews clamber down to the stream to take measurements. It is slippery work, with plenty of blackberries, devil's club, and stinging nettles in the way. The crews record what they find in their field notes and move on to the next site, day after 10-hour day, in all kinds of weather.

15. Before 1998, inventory crews relied on subjective professional judgment to determine whether salmonids could get through a culvert. (See Exhibit F, Bates No. T1000011.) They considered site conditions such as hydraulic drop (e.g., whether the culvert was "perched" above the streambed), culvert slope, water depth, and velocity. "Professional judgment" is not easily taught, however, and my staff and I decided we needed to create a standardized

method that other people could be trained to use. We developed a standard fish passage barrier assessment protocol, and published it in 1998 in a manual entitled *Fish Passage Barrier Assessment and Prioritization Manual*. As updated in 2000, the WDFW culvert assessment manual is attached as Exhibit E. The WDFW protocol is now widely used throughout the Pacific Northwest. For more information about WDFW's fish passage barrier assessment manuals, please refer to the Declaration of Michael R. Barber.

16. The WDFW barrier assessment protocol has two parts: Level A and Level B. Level A is a basic assessment that can be done onsite. The inventory crew takes measurements of the culvert and the stream, and looks inside the culvert to see whether streambed material is present. Sometimes, this is enough for the crew to determine on the spot whether fish can get through the culvert. (See Exhibit E, pages 11-12, 14-17; Bates Nos. USFWS 000890 – USFWS 000891, USFWS 000893 – USFWS 000896.) The crew may use professional judgment to gauge whether the culvert blocks fish passage completely, or only partially. (See Exhibit E page 12, Bates No. USFWS 000891.) They make a rough estimate of the extent of impassability, assigning the designations full barrier (90-100%), two-thirds barrier (50-90%), one-third barrier (10-50%), or no barrier (0-10%).

17. If the results of the Level A analysis are inconclusive, the crew takes additional measurements for a Level B analysis. A Level B analysis calculates water velocity inside the culvert under certain conditions. If the calculated velocity exceeds the value for adult trout in Table 1 of Section 220-110-070 of the Washington Administration Code (Exhibit E

Appendix B, Bates No. USFWS 000985), the culvert is considered to be a barrier to fish passage.[1] The idea behind this method is that, if fish are not strong enough to swim upstream against fast-moving water inside the culvert, they will not be able to get through it, though some fish may still get through. WDFW crews used the Level A/Level B method to determine the passability of nearly all of the WSDOT culverts that the crews examined statewide.

18. If a culvert blocks fish passage, the next step is to determine how much fish habitat it blocks. When looking for culverts, the inventory crews perform basic habitat assessments. If the crew can tell right away that a culvert blocks fish passage, the crew makes a "threshold determination" of whether it blocks a significant amount of habitat. The crew walks 200 meters up- and downstream looking for natural fish passage barriers, such as natural waterfalls or sustained stream gradients exceeding 20%. If there are no natural fish barriers within 200 meters of the culvert, the crew concludes that the culvert blocks more than 200 meters of habitat. WDFW judges 200 meters to be significant, so the culvert is put on the list for further evaluation. (See Exhibit E page 36, Bates No. USFWS 000915.)

19. My staff and I developed methods for determining the amount and quality of fish habitat

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[1] For more about WAC 220-110-070, please refer to Paragraph 48 below, and to the Declaration of Robert Barnard, P.E.

blocked by culverts so that we could generate prioritized lists of culverts to be fixed. Once a culvert is determined to block more than 200 meters of habitat, it gets scheduled for a more in-depth habitat assessment under one of the methods described in the WDFW culvert assessment manual. (See Exhibit E pages 29-54, Appendix A Physical Habitat Survey Field Form, and Appendix F; Bates Nos. USFWS 000908 – USFWS 000933, USFWS 000978 – USFWS 000979, and USFWS 001013 – USFWS 001015.) Habitat assessment crews visit each culvert, walk the stream, take measurements, and record their observations. This work can be dangerous, tedious, and very physically demanding. Sometimes, landowners are unwilling to let the crews enter their land to do the work. Habitat information that the crews collect is recorded, along with other information, so that the culvert can be evaluated and compared with other culverts in the prioritization process described below.

B. Recording the Information in a Computer Database

20. Until the late 1990s, WDFW maintained several independent computer databases related to fish passage. As information from culvert inventories began accumulating and data technology improved, my staff and I knew we needed a centralized, standardized way to record it. In 1998, Brian Benson of WDFW developed such a database, now called the Fish Passage and Diversion Screening Inventory (FPDSI) database. It primarily supports WDFW's inventory efforts on WSDOT rights-of-way and

WDFW-owned lands,[2] and it has also been a repository for inventory information collected by recipients of culvert inventory grants. The database now has many thousands of entries. For information about the current status of the FPDSI, please refer to the Declaration of Michael R. Barber.

C. Deciding Which Culverts to Fix First Using the Fish Passage Priority Index

21. The collective wisdom of fisheries biologists is that efforts to protect and restore wild salmonid populations can best succeed if we schedule habitat and fish passage restoration projects in the most cost-effective manner so as to maximize fish benefits. How do we measure and compare the fish benefits from fixing blocking culverts? It seemed to me in the early 1990s that we needed a "common currency" that could be applied to every potential culvert project statewide. By incorporating many relevant factors into a single, standardized index number, we could develop a tool for comparing the relative benefits of correcting different fish passage barriers in different watersheds or within a single watershed. Values unique to a particular project, such as its connection to another project, could be incorporated as "value-added parameters" if desired, but would not be part of the index number itself.

22. I advanced the "single number concept" with the Priority Index (PI) methodology for fish

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[2] For information about culvert inventories on lands owned by the Washington Department of Fish and Wildlife, please refer to the Declaration of Michael R. Barber.

passage projects. My staff and I developed the Fish Passage Priority Index in 1991 as a way to implement the 1991 legislation that launched the WSDOT culvert program (Exhibit C). We first published it in the 1992 progress report on the WSDOT program (Exhibit F, Bates No. T1000015). It was later published in the 1998 and 2000 WDFW culvert assessment manuals. It is still widely used today.

23. The PI for each fish passage project is a numeric indicator giving each project's relative priority with respect to other projects. This *relativism* is crucial. The PI works because it provides a general, objective framework for overall prioritization. The PI incorporates a variety of factors, and no single factor for any individual species dominates.

24. The PI equation looks complex, but it is logical, and it works. Here it is:

$$PI = \sum_{\text{all species}} \sqrt[4]{[(BPH) \times MDC]}$$

Where:

PI = Fish Passage Priority Index number for a particular project, indicating the relative benefit of the project considering cost.

$\sum$ = A mathematical symbol indicating that individual values are to be summed. The overall project PI is the sum ($\Sigma_{\text{all species}}$) of individual PI values calculated for each species present in a stream (e.g., PI_{coho} is added to PI_{chum} to obtain $PI_{\text{all species}}$).

$\sqrt[4]{}$ = Quadratic root symbol. The quadratic root is used because otherwise the equation would generate an unwieldy range of gigantic numbers.

B = Proportion of passage improvement achieved from a particular culvert correction project—roughly reflects whether the culvert is a partial or total barrier to fish passage and gives greater weight to projects that would correct total barriers. See Paragraph 16 above for more.

P = Annual adult fish production potential per m^2 of habitat opened up if the culvert were fixed – gives greater weight to projects that have the potential to produce the most fish. Each species has its own "P."

H = Habitat gain in square meters (m^2) – the amount of habitat that would be opened up if the culvert were fixed – gives greater weight to projects that would open up more habitat.

M = Mobility Modifier – gives greater weight to projects that would open up habitat for anadromous species.

D = Species Condition Modifier – gives greater weight to less healthy species.

C = Cost Modifier – gives greater weight to less costly projects. Anything over $500,000 is considered to be a high cost project.

The P and H factors are discussed in greater detail below. For more detail about the other factors, see Exhibit E, pages 55-57 (Bates No. USFWS 000934 – USFWS 000936).

25. **The P Factor.** The P factor estimates the number of adult fish that could *potentially* be produced annually by the habitat made available by correction of the passage barrier. It is not intended to predict the number of fish that *would* be produced. My staff and I chose standard "P" values for each salmon species by examining the scientific literature that was available in the early 1990s. Most of it was based on research done in the 1970s and 1980s. (See Exhibit F, Bates Nos. T1000060 – T1000061.) We added "P" factors for steelhead and trout later in the 1990s after the merger of the Washington Departments of Fisheries and Wildlife. The following table shows the "P" factors for salmon and steelhead that are currently used in the Fish Passage Priority Index. (See Exhibit E, pages 55-56; Bates Nos. USFWS 000934 – USFWS 000935.)

Salmon and Steelhead "P" Factors Used in the Fish Passage Priority Index		
Species	**Type of Habitat**	**Methodology/Source**
Coho Salmon	Rearing	(0.5 coho smolts/m^2)(0.10 smolt to adult survival) = 0.05 coho adults/m^2 of rearing habitat
		See Exhibit F (Bates No. T1000060)
Chinook Salmon	Rearing	Spring/Summer Chinook: (0.5 spring/summer chinook smolts/m^2)(0.018 smolt/adult survival) = 0.009 spring/summer chinook adults/m^2 of rearing habitat

		Fall Chinook: (0.5 fall chinook smolts/m^2)(0.015 smolt/adult survival) = 0.0075 fall chinook adults/m^2 of rearing habitat
		Spring/Summer and Fall Chinook are combined for a composite chinook production of 0.016 chinook adults/m^2 of rearing habitat
		See Exhibit F (Bates No. T1000060)
Chum Salmon	Spawning	(0.5 female/m^2 of spawning habitat)(2500 eggs/female)(0.10 egg to fry survival)(0.01 fry to adult survival) = 1.25 chum adults/m^2 of spawning habitat
		See Exhibit F (Bates No. T1000061)
Pink Salmon	Spawning	(0.5 female/m^2 of spawning habitat)(2500 eggs/female)(0.10 egg to fry survival)(0.01 fry to adult survival) = 1.25 pink adults/m^2 of spawning habitat
		See Exhibit F (Bates No. T1000061)
Sockeye Salmon	Spawning	(3500 eggs/redd)(0.0025 egg survival to adult) = (8.75 adults/ redd)/2.9 m^2/redd = 3 sockeye adults /m^2 of spawning habitat
		See Exhibit F (Bates No. T1000061)
Steelhead	Rearing	(0.06 smolts/m^2)(0.035 smolt survival to adult) = 0.0021 steelhead adults/m^2 of rearing habitat
		See WDFW/WSDOT 1997 report to Legislature (app. XIII)

26. **The H Factor.** As described above in Paragraph 18, habitat assessment crews collect information about the habitat associated with each fish-blocking culvert. Habitat gain is expressed in square meters (m^2) of either spawning or rearing habitat. Spawning area is used for those species (chum, pink, and sockeye salmon) whose production is limited primarily by spawning habitat. Rearing area is used for those species (coho and chinook salmon, steelhead, and trout) whose production is limited primarily by rearing habitat. (See Exhibit E, pages 31-34 and Appendix E; Bates Nos. USFWS 000910 – USFWS 000913 and USFWS 001007 – USFWS 001012.) Spawning and rearing areas can be adjusted by a Habitat Quality Modifier, a subjective estimate of habitat quality to account for the decreased production potential of degraded streams. (See Exhibit E, pages 33, 38-39; Bates Nos. USFWS 000912, USFWS 000917 – USFWS 000918.) Data collected from habitat surveys are processed in a customized spreadsheet that generates a detailed report for each stream surveyed. (See Exhibit E, Appendix H; Bates Nos. USFWS 001019 – USFWS 001021.)

27. When fish species with similar freshwater life histories occupy the same habitat, they compete with each other, which tends to reduce the production of each species below what it would be without the competition. For example, coho and steelhead juveniles spend a lot of time in freshwater before heading to sea, and they compete for food and shelter. To adjust for that competition, my staff and I developed the species complex factor. It is used to reduce the habitat area (H) used in the Priority Index

formula. (See Exhibit E pages 39-40; Bates Nos. USFWS 000918 – USFWS 000919.)

28. Sometimes, there are multiple fish passage barriers on the same stream. But when we calculate a PI for a culvert, we assume it is the only barrier in the watershed because we don't know when the others might be fixed. So, when we calculate "H" for a culvert, we include all of the fish habitat upstream of the culvert, even though there may be other fish passage barrier culverts upstream.

D. Response to Tribal Use of the Fish Passage Priority Index

29. I understand that the Tribes in this Subproceeding have sought to use the "BPH" factors in the Fish Passage Priority Index to generate numbers of lost fish production and effects on fisheries from state-owned fish-blocking culverts. The PI was never intended to be used in that manner. We developed the PI solely as a tool to help decision-makers decide how to allocate limited funds when selecting fish passage projects. The PI uses standardized, generic production factors. That makes it a good tool for comparing the relative benefits of different projects, but a bad one for making predictions about fish production in particular streams. It is not an accurate method to predict actual salmon production upstream of fish-blocking culverts, or actual salmon harvest, and it is a misuse of the PI to use it for those purposes. The following paragraphs give some examples of why that is so.

30. **Double counting of habitat.** Sometimes, there are multiple state-owned fish passage barriers on the same stream. For each barrier, a

separate PI is calculated that assumes it is the only barrier in the watershed, as discussed above in paragraph 28. If there are four barriers in the watershed, and we add up the "potential" fish production from each one, we wind up counting some areas of the stream four times.

31. **Over-estimation of potential benefits.** Several factors may contribute to over-estimation of potential benefits of barrier correction. Among other things, these include:

- Presence of non-state-owned fish passage barrier culverts upstream or downstream of a state-owned barrier.
- Many areas upstream of partial blockages may already be fully seeded—that is, the fish are already getting past the partial barrier and spawning. Removing the barrier may not increase fish production.
- The "P" factors used in the PI are based on research from streams with shallow gradients, where fish production is highest. Fish production is less in streams with steeper gradients, such as we find on the Olympic Peninsula. Research by WDFW's Dave Seiler and others has shown that some watersheds are more productive than others.
- The "P" factors used in the PI assume that smolt-to-adult survival will be the same for every watershed in every year. That does not reflect reality. Many things affect the survival of young salmon as they grow to adulthood. For example, ocean conditions can have a huge

impact, as described in the Declaration of Jeffrey P. Koenings, Ph.D.

- The "P" factors used in the PI are based on standard production values for each species, but in particular stream systems the collective experience of biologists may suggest that lower values are more realistic. An example is sockeye salmon in Coal Creek, which flows into Lake Washington at Bellevue.

32. **Percent Passage Improvement ≠ Percent Fish Improvement.** As described above in Paragraph 16, crews conducting culvert inventories may make rough judgments about whether a culvert is a full or partial fish passage barrier. For partial barriers, they may estimate the extent of impassability, assigning the designations two-thirds barrier (50-90%), or one-third barrier (10-50%). The "B" factor in the PI equation, which represents proportion of passage improvement, relates to an approximate mid-point of those ranges. (See Exhibit E page 57, Bates No. USFWS 000936.) It is not intended to quantify the proportion of increased fish production that would result from a fish passage barrier correction, and I am aware of no evidence of a close correlation. The "B" factor is intended only to assist decision-makers in the prioritization model.

33. **Delay of fish use.** Sometimes, it can take years for salmon to find their way into newly-available habitat.

34. **Escapement goals.** Escapement goals—the number of fish that must get to the spawning grounds to sustain the run optimally—are based on the habitat available in the water-

shed. Fishery managers would need to increase escapement goals to account for the habitat opened up from fixing culverts. Fish needed for escapement would not be available for harvest.

35. **Habitat degradation.** The "P" factors used in the PI are based on high quality streams with ample fish habitat. Those numbers may not work for degraded streams or smaller streams. For example, WDFW research suggests that more sensitive species disappear from urban streams that get a lot of run-off from impervious streets and parking lots, and the only remaining salmonids are cutthroat trout or late-spawning chum salmon.

36. **Depressed stock status.** The "P" factors used in the PI are based on healthy fish stocks. For stocks in poor condition, such as those listed as threatened or endangered under the federal Endangered Species Act, there may not be enough spawners to use the stream habitat that is already available.

37. **Fisheries in Alaska and Canada.** Juvenile salmon from Washington rivers migrate to Canadian and Southeast Alaskan marine waters before reversing their migration and returning to Washington as adults. People fish for them in those waters, reducing the number that return to Washington. It is hoped that the new 2009-2018 chinook annex that has been negotiated under the Pacific Salmon Treaty will allow more Washington-origin chinook to return to Washington.

38. **Density Dependent Mortality.** Because of crowding and competition for food and shelter, increasing the production of juvenile fish can

decrease their freshwater or marine survival. The result may be little or no net increase in adult production even if we increase the juvenile production because we unblocked a culvert.

39. **Lack of full harvest.** Even where more salmon are produced when a fish passage barrier is removed, fishermen may be unable to catch them all because of factors such as:

- Low market prices for fish may make fishing uneconomical.
- Fisheries may be constrained to protect weak stocks mixed in with healthier stocks.
- Bad weather may keep fishermen home.
- Fish may arrive while fisheries are closed.
- Fishing opportunity is subject to court orders and state/tribal negotiations.

E. Scoping, Design, Construction, and Post-Construction Monitoring

40. For WSDOT culverts, the Fish Passage Priority Index formula typically generates PI numbers that range from 1 to 62. Other types of structures, such as dams, may generate higher numbers. In general, the higher a culvert's PI number, the higher the priority to fix the culvert. PI numbers are a valuable tool that decision-makers can use to compare culverts, but they do not in themselves dictate the order in which culverts are fixed. Assigning a PI number is just an initial step in deciding what to do about a fish passage barrier culvert. WDFW and WSDOT use a scoping process to make decisions about fish passage projects. In the

scoping process, biologists, engineers, and others consider practical factors such as construction feasibility or the presence of other blocking culverts. Challenging geology may be a reason to conduct a repair at an easier site first. Sometimes, culvert repair projects are selected so as to match costs with available funds. Projects may be spread around regionally to avoid overwhelming staff in one area, or concentrated in one area to be efficient. The aim is to get the greatest benefit from the resources available.

41. For more information about the scoping process and project inspection and monitoring, please refer to the Declaration of Michael R. Barber. For more information about culvert design, please refer to the Declaration of Robert Barnard, P.E.

IV. Fish Passage in Washington Since the Late 1990s

42. Beginning in the late 1990s, the whole environmental community recognized the importance of fish passage. This recognition translated to legislative attention, emphasis on resolving fish passage problems on all state-owned lands, and efforts to bring WDFW technical expertise to the public. For a description of what WDFW has done to address fish passage problems on its own lands, please refer to the Declaration of Michael R. Barber. Please refer to the Declarations of Michael R. Barber and Robert Barnard, P.E., for information about the work that WDFW has done to publish technical manuals and provide training and technical assistance to the public.

43. During the late 1990s, the Washington State Legislature enacted several key bills that

addressed fish passage and other environmental issues. A 1997 enactment directed WSDOT and WDFW to convene a Fish Passage Task Force with Tribes, local governments, businesses, and environmental groups. I co-chaired that Task Force with Paul Wagner from WSDOT. We presented a report to the legislature in December 1997 with recommendations for better coordination, training, funding, and permit streamlining for fish passage projects.

44. The Legislature adopted some of our recommendations in 1998, along with other salmon recovery measures. Most of the legislation is currently codified in Chapters 77.85 and 77.95 of the Revised Code of Washington. Please refer to the Declaration of Jeffrey P. Koenings, Ph.D., for more about salmon recovery efforts in Washington.

45. The 1998 legislation recognized the wisdom of targeting salmon recovery dollars where they could do the most good. To that end, the Legislature directed the Washington Conservation Commission, in consultation with Tribes and others, to invite the region's experts to identify habitat factors limiting salmon production in major watersheds across the state. (See 1998 Wash. Laws ch. 246, § 10, attached as Exhibit G.) Over a period of several years, the Conservation Commission published Salmon Habitat Limiting Factors Reports for all basins in Washington that produce salmon and steelhead. Fish passage was only one of many habitat factors examined. Others included floodplain conditions, riparian conditions, sediment conditions, woody debris conditions, pool habitat conditions, water temperature conditions, high flow conditions, low flow

conditions, and estuarine and nearshore habitat. The relative importance of those factors was different for each watershed. For some basins, such as the Lake Washington watershed, fish passage barrier culverts were found to be significant. For others, such as the Nisqually watershed, culverts were not identified as a significant limiting factor. The Conservation Commission's final summary report is attached as Exhibit H.

46. Another 1998 enactment authorized WSDOT to administer a fish passage grant program to assist state, local, tribal, and private groups to identify and remove fish passage barriers. (See 1998 Wash. Laws ch. 249, § 16, attached as Exhibit I.) In 1999, the Legislature created the Salmon Recovery Funding Board (SRF Board) to oversee a coordinated process for allocating grant monies for salmon recovery projects statewide, with administrative support from the Interagency Committee for Outdoor Recreation (now the Recreation and Conservation Office). (See 1999 Wash. Laws 1st sp. Sess. ch. 13, attached as Exhibit J.) It ultimately took over the grant program for fish passage barriers. A review team reviews and ranks project proposals that come before the SRF Board. That team incorporated the WDFW Fish Passage Priority Index methodology into its ranking process for fish passage projects, and still uses it today.

V. WDFW Fish Passage Research and Adaptive Management

47. One of the reasons I stayed at WDFW for 25 years was the passion and dedication of my colleagues. Throughout my career, my staff and others

conducted scientific and engineering research to make things better for fish, including our fish passage program. It was always a team approach. Mike Barber, Brian Benson, Tom Burns, Larry Cowan, Susan Cierebiej, Eva Wilder, Greg Johnson, Jim Lenzi, Pat Schille, Eric Egbers, Pat Powers, Ken Bates, and Bob Barnard all contributed to the development of our fish passage and screening procedures. It was a trial-and-error effort that started with good, technically sound ideas, followed by implementation of the ideas, recognition of needed improvements, group discussions to devise improved methods, implementation of the improvements, and repeating this cycle over and over. Using research to improve the way we do things is sometimes called "adaptive management," and this was adaptive management at its best. It could not have been accomplished without the fine-tuned team approach we had.

48. As described above, Washington State law provides that anyone who undertakes a construction project in state waters must obtain a hydraulic project approval from WDFW. WDFW and its predecessors have adopted rules to implement that law. An example of our adaptive management approach is the rule-making we did in the early 1990s. The current hydraulic rules were adopted in 1994 after a two-year revision process in which the Tribes were invited to participate. (The pre- and post-1994 culvert rules are attached as Exhibit K.) The 1994 rules reflected state-of-the-art research when they were adopted. For the first time, they identified specific options for culvert installation, and formalized specific fish passage criteria for culverts, including culvert size and maximum water veloci-

ty. Ken Bates, then a WDFW engineer, developed the water velocity criteria based on research conducted during the 1980s on the swimming abilities of adult fish. As of 1994, little information was available about the swimming abilities of juvenile salmon, so we used a six-inch trout as the closest surrogate.

49. Since 1994, several state and federal agencies, including WDFW, have participated in studies of juvenile salmon swimming abilities at WDFW's Skookumchuck Hatchery near Tenino, Washington. In 1997, Pat Powers of WDFW conducted a study involving juvenile coho salmon, which showed better passage in smooth pipes. In 2005-06, Battelle conducted a study on juvenile coho salmon passage through culverts retrofitted with baffles (excerpts attached as Exhibit L). The results suggest that baffles may make it easier for juvenile fish to swim upstream, but that juvenile fish behavior is complex. Both studies were funded by WSDOT.

50. Perhaps the most innovative research of the past decade has focused on the stream simulation approach to culvert design. Stream simulation is conceptually different from prior methods. Please refer to the Declaration of Robert Barnard, P.E., for a description of the stream simulation method and research about it.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on this *19th* day of March, 2009, at Olympia, Washington.

s/Paul Sekulich,
PAUL SEKULICH, PH.D.

EXHIBITS TO THE DECLARATION OF PAUL SEKULICH, PH.D.

Exhibit A
Curriculum Vitae of Paul Sekulich, Ph.D.

Exhibit B
Memorandum of Understanding Between the Washington State Departments of Fisheries, Wildlife, and Transportation Concerning Compliance With the Hydraulic Code (1990) (Bates Nos. T1000033 – T100054)

Exhibit C
1991 Wash. Laws, 1st sp. Sess., ch. 15, § 22 (Bates Nos. F0008267 – F0008268)

Exhibit D
Interagency Agreement between the Washington Department of Fisheries and the Washington State Department of Transportation to Perform a Fish Passage Inventory Statewide & Work With DOT in Planning Projects and Developing Agreements to Remove Fish Barriers Within DOT Rights-of-Way (December 6, 1991) (Bates Nos. T1000056 – T1000058)

Exhibit E
Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual (Washington Department of Fish and Wildlife, August 2000) (Bates Nos. USFWS 000875 – USFWS 001032)

Exhibit F
Excerpts from *Fish Passage Program Progress Performance Report for the Biennium 1991-1993* (Washington Department of Fisheries/Washington Department of Transportation, December 1992) (Bates Nos. T1000001, T1000002, T1000005, T100007 – T1000013, T1000015, T1000016, T1000060, T1000061)

Exhibit G
1998 Wash. Laws ch. 246

Exhibit H
Carol J. Smith, Ph.D., *Salmon Habitat Limiting Factors in Washington State* (Washington State Conservation Commission, 2005) (Exhibit AT 769 in Plaintiff Tribes' Exhibits, Corrected and Amended List, August 8, 2007)

Exhibit I
1998 Wash. Laws ch. 249

Exhibit J
1999 Wash. Laws 1st sp. Sess. ch. 13

Exhibit K
Washington Administrative Code § 220-110-110 Culvert Installation (1990 edition), and Washington Administrative Code § 220-110-070 Water Crossing Structures (1995 edition)

Exhibit L
Excerpts from Pearson, et al., *Final Report: Research on the Upstream Passage of Juvenile Salmon through Culverts: Retrofit Baffles* (Battelle Memorial Institute, April 2006) (Bates Nos. 113709 – 113714)

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF MICHAEL R. BARBER IN LIEU OF DIRECT TESTIMONY

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I, MICHAEL R. BARBER, declare as follows:

1. I am a Section Manager within the Habitat Program of the Washington Department of Fish and Wildlife (WDFW). I have held that position since December 2001. Among other things, I oversee WDFW's program to find and fix fish passage barriers on WDFW-owned lands. Under a contract with the Washington State Department of Transportation (WSDOT), I manage the WDFW work supporting WSDOT's fish passage program, supervise the preparation of the annual progress reports that describe the program, and update WSDOT's Ten-Year Plan of prioritized fish passage projects. I am also involved in budgeting and in developing fish passage assessment methods and training materials. My resumé is attached as Exhibit A.

2. I hold Bachelor and Master of Science degrees in Biology, both from Eastern Washington University. I earned my Master's degree in 1988. My

thesis examined the relationship between stream flow and fish habitat on Chamokane Creek in the Spokane Indian Reservation.

3. In 1985, I began working as a Fish Biologist with the Upper Columbia United Tribes Fisheries Center in Cheney, Washington. The Upper Columbia United Tribes is an intertribal organization of the Spokane, Kalispel, Coeur d'Alene, and Kootenai Tribes, and now the Colville Tribes as well. To assist the Northwest Power Planning Council in its policy development for the Upper Columbia River region, I directed a study to assess fishery improvement opportunities on the Pend Oreille River. For my master's thesis, I collected and analyzed habitat data for a study on the Spokane Indian Reservation. The results of both studies were published in technical reports and have been cited in others.

4. In September 1990, I joined the Washington Department of Fisheries[1] Habitat Program as a Fish Biologist. For about five years, I was involved in permitting decisions for construction projects and timber harvests. In 1995, I started working for Dr. Paul Sekulich on fish passage barrier projects. As described in the Declaration of Paul Sekulich, Ph.D., WDFW fixed culverts for several Western Washington counties during the mid-1990s. I was in charge of some of those projects, as well as some fish passage projects for WSDOT. I acted as

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[1] The Washington Department of Fisheries was a predecessor to the Washington Department of Fish and Wildlife.

Project Manager on about 18 fish passage construction projects from start to finish.

5. As described in Dr. Sekulich's declaration, WDFW has been conducting fish passage barrier inventories and habitat assessments for WSDOT since 1991. In 1999, I became the supervisor of the inventory crews, a responsibility that I still have, while continuing to serve as a Project Manager for fish passage construction projects. I was responsible for preparing the 1998 and 2000 versions of WDFW's *Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual.* (The 2000 version is attached as Exhibit E to the Declaration of Paul Sekulich, Ph.D.) I also served as a technical expert in the evaluation of fish passage grant applications for several grant programs described in the Declarations of Paul Sekulich, Ph.D., and Jeffrey P. Koenings, Ph.D.

I. Finding, Prioritizing, and Fixing Washington State Highway Culverts that Block Fish Passage

6. As described in the Declaration of Paul Sekulich, Ph.D., WDFW plans its fish passage work in a sequence: (1) find and evaluate the culverts that block fish passage; (2) record the information in a database; (3) prioritize the culverts for correction so as to get the most "bang for the buck;" (4) "scope" each correction project, that is, evaluate the site and possible fish passage solutions; (5) design a suitable structure that will achieve fish passage; (6) install it; and (7) after construction, monitor it to see

whether it worked. WDFW has been performing fish passage work for WSDOT since 1991 under a series of contracts. The 2007-09 contract is attached as Exhibit B.

A. Inventory: Finding and Evaluating WSDOT Culverts that Block Fish Passage

7. The Declaration of Paul Sekulich, Ph.D., describes how WDFW developed methods to find culverts that block fish passage and assess how much habitat they block. As Dr. Sekulich describes, WDFW began an inventory of culverts in the Washington State highway system in 1991. I have been supervising the inventory crews since 1999. At first, we had only one two-person crew, but we added a second in 2003. In 2007, they finished the fish passage barrier assessment part of the WSDOT culvert inventory, on more than 7,000 miles of highways statewide. It took 16 years to complete. It took that long in part because culvert assessment is hard work, as described in Dr. Sekulich's declaration, and in part because we got better at finding culverts when improved mapping and navigation technology became available, such as Global Positioning System devices. By the end of 2007, the inventory crews had found 3,185 WSDOT culverts in fish-bearing streams statewide. Of those, 1,859 were determined to be partial or complete fish passage barriers. The following table shows the results for the *United States v. Washington* Case Area:

Fish Passage Barrier Culverts Within WSDOT Rights-of-Way In the *United States v. Washington* Case Area				
Culverts that block > 200 meters of salmon and steelhead habitat	Culverts that block > 200 meters of nonanadromous fish habitat	Culverts that block ≤ 200 meters of fish habitat	Culverts that block an unknown amount of habitat	Total
807	122	279	7	1,215

8. If a culvert blocks fish passage, the next step is to determine how much habitat it blocks. If an initial assessment shows that the culvert blocks more than 200 meters of habitat, it gets put on the list for a more extensive habitat assessment under one of the methods described in WDFW's *Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* (2000 version attached as Exhibit E to the Declaration of Paul Sekulich, Ph.D.). WDFW has scheduled its habitat assessment work by starting with the streams thought to have the most blocked habitat, so that the culverts suspected to be the highest priority to fix could be scheduled for correction as soon as possible. In July 2005, a two-person crew was formed to conduct habitat assessments full-time. After the two crews that were doing the culvert inventories described in Paragraph 7 finished their work, they were reassigned to habitat assessments. At this time, WDFW has three two-person crews conducting habitat assessments for the

WSDOT culverts that have been identified as fish passage barriers. They visit each culvert, walk the stream, and take measurements in accordance with WDFW protocols. We use the information they gather to generate prioritized lists of culverts to be fixed. As described in Dr. Sekulich's declaration, doing habitat assessments is strenuous and sometimes dangerous. Each crew walking the streams can complete about one mile per day. The young people who do this work are frequently away from home for days at a time. With three crews, we expect to complete all habitat assessments for the entire state highway system by mid-2015.

B. The Fish Passage and Diversion Screening Inventory Database

9. WDFW records the culvert inventory information it collects in a computer database now called the Fish Passage and Diversion Screening Inventory (FPDSI) database. Brian Benson of WDFW designed it in 1998 and has been maintaining and continuously updating it ever since. He set it up with internal links so that information can be easily retrieved and analyzed. It now contains over 36,000 entries, including nearly 20,000 for human-made structures in fish-bearing or potentially fish-bearing streams. Of those, approximately 58% are partial or complete fish passage barriers. The FPDSI contains data collected by WDFW and by recipients of culvert inventory grants. The FPDSI is not a comprehensive or complete inventory of fish passage barriers within the State of Washington, however. The Washington Department of Natural Resources and the United States Forest Service maintain their own separate databases with information from inventories they

have conducted, for example. WDFW does have some information about other inventories that local governments, Indian Tribes, and environmental groups have conducted, but only if that information has been voluntarily provided to WDFW.

10. **Data on Washington State Parks Culverts.** WDFW conducted a separate inventory of culverts at some Washington State Parks facilities in 2007 under a contract with the Washington State Parks and Recreation Commission. The following table shows the results of that inventory, as currently reflected in the FPDSI.

Fish Passage Barrier Culverts Within Washington State Parks Facilities in the *United States v. Washington* Case Area				
Culverts that block > 200 meters of salmon and steelhead habitat	Culverts that block > 200 meters of nonanadromous fish habitat	Culverts that block ≤ 200 meters of fish habitat	Culverts that block an unknown amount of habitat	Total
28	25	23	13	89

11. As of March 2009, the FPDSI contains 1375 records of WSDOT, WDFW, and State Parks fish passage barrier culverts within the *United States v. Washington* Case Area. For 393 of those culverts, WDFW has conducted habitat assessments to identify all additional human-made barriers between the known salmon access point and the first upstream

natural fish barrier. Within that group of 393, the FPDSI shows 42 anadromous fish passage barrier culverts in the Case Area that block more than 200 meters of habitat in streams with no other known anadromous barriers. A list is attached as Exhibit C.

C. Prioritization and Scoping: Evaluating a Culvert Site and Choosing a Fish Passage Correction Option

12. Once a habitat assessment for a culvert has been completed and the data recorded, a Priority Index number (PI) can be calculated for the culvert. Please refer to the Declaration of Paul Sekulich, Ph.D., for a description of the Fish Passage Priority Index and how PIs are calculated. WDFW has calculated PIs for about 462 WSDOT barrier culverts statewide, including 341 within the *United States v. Washington* Case Area. Their PI numbers range from 1 to 62. In general, the higher a culvert's PI number, the higher the priority to fix the culvert. We did not wait to finish all the PI calculations before we started fixing WSDOT culverts, however. We have prioritized culverts for correction with whatever list we had at the time, focusing on those with higher PIs, especially if there were no other fish passage barriers in the watershed. As of early 2009, most WSDOT barriers with a PI greater than 20 and no other barriers in the watershed have been fixed.

13. PI numbers are a valuable tool that decision-makers can use to compare culverts, but they do not in themselves dictate the order in which culverts are fixed. Assigning a PI number is just an initial step in planning what to do about a fish passage barrier culvert. WDFW and WSDOT use a scoping

process to make decisions about fish passage projects. (See Exhibit B, Bates Nos. F0007042 – F0007043.)

14. Biologists get the scoping process started. First, they verify the information already collected about the culvert. A WDFW biologist visits the culvert and checks to see whether the information collected in the inventory and habitat assessment is correct and still current, filling in any data gaps. Next, the biologist confirms that habitat conditions and fish species expected to benefit are correctly reflected in the PI for the culvert. If not, the PI may be recalculated. Then, the biologist collects other information about the culvert, such as whether there are other human-made barriers in the watershed, and whether other habitat restoration efforts are occurring in the watershed. The biologist also considers the feasibility, likelihood of success, and potential cost of a project. The biologist summarizes this information and generates a map to show the location of additional human-made barriers located downstream and upstream of the barrier. An example, relating to two culverts on Anderson Creek under State Route (SR) 16 near Port Orchard, is attached as Exhibit D.

15. The biologist may either recommend that a project be put on "Hold" until other habitat problems in the watershed are corrected, or that a project go forward. For the Anderson Creek culverts described in Exhibit D, the biologist recommended that the project go forward because of high-quality habitat upstream, even though there are other fish passage barriers in the watershed. The next step in the scoping process is the assignment of a WDFW scoping engineer to develop conceptual designs for

barrier correction. To do that work, WDFW has eight environmental engineers statewide and two engineering aides who assist them. The engineer visits the site, takes measurements and photos, evaluates options, and prepares a written report with recommendations for fish passage solutions, which may include a rough cost estimate. An example, relating to the Anderson Creek culverts described in Exhibit D, is attached as Exhibit E. With current staffing, WDFW is able to prepare about 80 scoping reports per biennium for WSDOT.

16. Once the conceptual design options have been identified, WSDOT staff get involved, along with the WDFW Area Habitat Biologist assigned to the region where the culvert site is located. They meet with the WDFW scoping biologist and engineer in a "pre-scoping meeting." Together, the group selects a preferred design option. For example, Exhibit D shows that the preferred design option selected for the Anderson Creek culverts is replacement with a single stream simulation culvert estimated to cost $6.4 million.[2] Once a preferred design option has been selected, the project is eligible to be placed on the WSDOT Ten-Year Plan for fish passage barrier correction, which I prepare in coordination with the WSDOT Environmental Services Office. The Anderson Creek site described in Exhibits D and E, which has a PI of 38.6, has been placed on the Ten-Year Plan. WSDOT has requested $479,000 for engineering and design work during the 2009-11

[2] Please refer to the Declaration of Robert Barnard, P.E., for a discussion of the stream simulation culvert design method.

biennium, with construction possible during the 2011-13 biennium.

D. Design and Construction

17. During the 1990s, WDFW designed and constructed about 30 fish passage projects for WSDOT. I was the Project Manager on some of those projects. Today, WSDOT uses its own engineers to do the design and hires private contractors to do the construction. WDFW provides input at the "60% design" level, where major design elements are well established. WDFW reviews the design to make sure it is consistent with the preferred design option developed and agreed to during the scoping process. WDFW also has a role at the permitting stage, when it receives WSDOT's application for a hydraulic project approval (HPA) under RCW 77.55.021. WDFW may impose additional conditions for the protection of fish life, such as restrictions on the timing of construction.

E. Monitoring to See Whether the Fish Passage Project Worked

18. Immediately after WSDOT finishes a fish passage construction project, WDFW inspects it to verify that it was built as permitted and designed. WDFW also does that for fish passage projects on its own lands (described below). Among other things, WDFW determines whether the newly-built structure is passable to fish. For WSDOT culvert projects constructed with dedicated funds, under the "I-4 program,"[3] WDFW checks the culvert again after it

[3] Please refer to the Declaration of Paul J. Wagner for a description of the WSDOT I-4 program.

has been in place for one winter storm season to verify that it remains passable to fish.

19. For WSDOT culvert projects constructed under the "I-4 program," WDFW conducts fish spawner surveys in the stream before construction and one year after construction. The purpose is to verify that adult salmon are getting through the new structure and spawning upstream of it. WDFW does not check to see whether fish production actually increases after the culvert is fixed. The number of additional fish that might be produced from fixing a single culvert would not be detectable given the natural variability in run sizes due to ocean survival and other factors.

20. WDFW has four test sites where it conducts ongoing monitoring through annual spawner surveys. We want to know how different fish passage design methods compare with each other, so the four test sites represent four different design methods:

- Unnamed tributary to South Branch Big Creek (US 101, mile post 101.1 near Humptulips), to represent a hydraulic design option;
- Moose Creek, tributary to the North Fork Stillaguamish River (SR 530, mile post 44.0 west of Darrington), to represent a no slope design option;
- Fairchild Creek, tributary to Big Creek (US 101, mile post 105.6 near Humptulips), to represent a fishway retrofit design option; and
- Dogfish Creek, tributary to Liberty Bay (SR 307, mile post 0.07 near Poulsbo), to represent a stream simulation design option.

Please refer to the Declaration of Robert Barnard, P.E., for a description of these culvert design methods. The results of the annual surveys indicate that none of the projects are blocking fish passage, because we are not seeing a disproportionate number of adult fish or redds (salmon nests) downstream of the project sites.

II. Culverts on WDFW-Owned Lands

21. The Washington Department of Fish and Wildlife manages lands and roads of its own, which have culverts and, sometimes, fish passage problems. WDFW-owned lands include Wildlife Areas managed for wildlife habitat and public recreation, water access sites where people can launch boats to go fishing, and fish hatcheries. WDFW owns about 550,000 acres of land statewide, mostly in rural settings. That figure changes over time, as WDFW sometimes acquires or transfers lands.

22. In 1997, WDFW began an inventory of all fish passage and fish screening structures on its lands, including roads and culverts. I have been overseeing those inventories since 2001. They are complete within the *United States v. Washington* Case Area, but WDFW is still working on inventories and habitat assessments on its lands in the remainder of the state. WDFW has generally used the same inventory and prioritization methods on its own lands as it has on state highways, as described in WDFW's *Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* (attached as Exhibit E to the Declaration of Paul Sekulich, Ph.D.). The principal difference is that WDFW has performed "stream-based" inventories on

its own lands, in contrast to the "road-based" inventories it has conducted for WSDOT. In a "stream-based" inventory, biologists or technicians walk the entire stream looking for fish passage barriers, whether they are associated with a road or not. My staff have found 73 culverts that currently block fish passage on WDFW lands within the *United States v. Washington* Case Area, as follows:

Fish Passage Barrier Culverts on WDFW Lands Within the *United States v. Washington* Case Area			
Culverts that block > 200 meters of salmon and steelhead habitat	Culverts that block > 200 meters of nonanadromous fish habitat	Culverts that block ≤ 200 meters of fish habitat	Total
51	3	19	73

23. As fish passage barriers are identified, WDFW begins developing plans to correct them through a scoping process like the one described above for WSDOT culverts. WDFW first collects information on the biology and physical characteristics of the site. WDFW engineers then develop correction options with cost estimates. As data for particular sites become available, recommended solutions are chosen and projects are moved forward for implementation through the state capital budget process.

24. WDFW's goal is to fix all fish passage barriers on its lands by July 1, 2016, provided funding is available. The WDFW Habitat Program Ten-Year Capital Plan as of December 2008, which includes

WDFW's proposed schedule for fish passage barrier correction on its lands, is attached as Exhibit F. As of January 2009, the average cost per correction is estimated at $230,000, in 2008 dollars.

25. WDFW is making progress in fixing its fish passage barriers, including those within the *United States v. Washington* Case Area. In 2008, WDFW fixed six culverts on the Stillwater Wildlife Area, near Carnation. Two were replaced with foot bridges, two were replaced with new culverts, and two were simply removed. WDFW also replaced one culvert on the Johns River Wildlife Area near Grays Harbor. During the 2009-2011 biennium, WDFW plans to remove or replace fish passage barrier culverts at 21 sites within the *United States v. Washington* Case Area—20 on the Cherry Valley Wildlife Area near Duvall, and one on the Johns River Wildlife Area near Grays Harbor. This work is expected to cost more than four million dollars. WDFW currently plans to correct an additional 27 barrier culverts in the Case Area, 15 of which block more than 200 meters of habitat, during the 2011-2013 biennium.

26. Culverts are not the only capital funding needs that WDFW has. Maintenance and infrastructure upgrades have been long delayed at many WDFW facilities. For example, improvements at WDFW hatcheries are needed to implement the recommendations of the Hatchery Scientific Review Group described in the Declaration of Jeffrey P. Koenings, Ph.D. A January 2009 capital budget presentation that WDFW's Capital Planning and Facilities Management group prepared for the Washington Fish and Wildlife Commission is

attached as Exhibit G. The total WDFW 2009-11 capital budget proposed by Governor Gregoire was $87 million, and that does not cover all needs.

III. Bringing WDFW Technical Expertise to the Public

27. In the late 1990s, WDFW began developing educational materials and conducting training to help others, such as federal, tribal, and local governments, conservation groups, and landowners, to find, prioritize, and correct non-state-owned fish passage barriers. As described in the Declaration of Paul Sekulich, Ph.D., WDFW developed a standard fish passage barrier assessment protocol and published it in 1998 in a manual entitled *Fish Passage Barrier Assessment and Prioritization Manual.* I was involved in that project. WDFW began providing training and follow-up technical assistance to Salmon Recovery Funding Board grant recipients and others so that they could conduct culvert inventories. As described above in Paragraph 9, WDFW developed a fish passage database to act as a centralized repository for the data collected by grant recipients.

28. WDFW revised the 1998 culvert barrier assessment manual in 2000, adding new sections on fishways, dams, and surface water diversion screens. The 2000 version is attached to the Declaration of Paul Sekulich, Ph.D., as Exhibit E. I was involved in preparing the 1998 and 2000 versions, and I have been supervising the preparation of a new revision that we expect to release in 2009. The 2009 version provides additional guidance and updated

methodology. The contents of each version of the manual are summarized in the table below.

Level A culvert evaluation[4]	√	√	√ updated
Level B culvert evaluation	√	√	√
Physical Survey (PS) habitat assessment method[5]	√	√ updated	√
Threshold Determination (TD) habitat assessment method	√	√	√
Expanded Threshold Determination (ETD) habitat assessment method	√	√	No
Reduced Sampling Full Survey (RSFS) habitat assessment method	No	√	√
Priority Index (PI)	√	√	√
Fish Passage and Diversion Screening Inventory (FPDSI) Database users manual[6]	√	√	No
WA state precipitation map (for Level B analysis)	No	√	√
% passability table for barrier culverts	No	No	√
Non-culvert road crossings	No	No	√
Dams	No	√	√ Expanded

Fishway	No	√	√ Expanded
Miscellaneous obstructions	No	No	√
Natural Barriers	No	√	√ Expanded
Surface water diversions (gravity & pump diversions)	No	√	√
Screening Priority Index (SPI)	No	√	√
Inventory process (guidance on how to develop an inventory)	No	√	√ Expanded
Quattro Pro habitat data entry spreadsheets presented	√	√	No
Excel habitat data entry spreadsheets presented[7]	No	√	√ updated
Expected species use[8]	√	√ updated	√
Fish bearing stream criteria[9]	√	√ updated	√ updated
Glossary of terms	No	No	√
List of recommended equipment for inventory	No	No	√

Instructions for measuring channel width (Appendix H from the *Design of Road Culverts for Fish Passage*, WDFW 2003)[10]	No	No	√
Basic Culvert Surveying Techniques	No	No	√
Pump Flow Chart (surface water diversions)	No	No	√

[4] See Paragraph 16 of the Declaration of Paul Sekulich, Ph.D., for a discussion of the Level A analysis in the 2000 version of the manual. The 2009 revision updates the Level A flow chart by moving the water surface drop to the top of the chart and allowing the option of conducting a Level B analysis when culverts are not backwatered and the culvert slope is less than 1 percent.

[5] The 2000 revision added a discussion of pond and lake rearing habitat and included a "lake adjustment factor" to correct for over-estimation of rearing habitat in ponds and lakes. See page 38 in Exhibit E to the Declaration of Paul Sekulich, Ph.D. (Bates No. USFWS 000917).

[6] WDFW plans to develop a separate database users manual.

[7] See Appendix G of Exhibit E to the Declaration of Paul Sekulich, Ph.D. (Bates No. USFWS 001018). The 2009 revision updates the data entry spreadsheet to reflect terminology used in the 2009 manual (i.e. "OHW" changed to "SLW"; "downstream check" now called "fish access check"; "Barrier Site ID" changed to "Additional Feature Site ID"). Stream flow measurements are omitted in the 2009 version. Brook trout and brown trout are removed from the "Species Presence" section. WDFW has decided not to include them because they are exotic, non-native species.

29. WDFW has also developed a manual to provide guidance in the design of road culverts for fish passage. It was first published in 1999 and updated in 2003. The 2003 manual *Design of Road Culverts for Fish Passage* is attached as Exhibit B to the Declaration of Robert Barnard, P.E. WDFW expects to publish a new *Water Crossings Design Manual* in late 2010, which would replace the 2003 manual. WDFW has been providing technical assistance and training on the application of its culvert design manual since 1999.

30. Both of the WDFW fish passage technical assistance manuals, along with other technical guidance materials for fish passage and fish screens, are available to the public on the WDFW internet web site, http://wdfw.wa.gov/hab/engineer/habeng.htm.

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[8] Expected fish species use within different stream gradient strata table was updated in 2000 to reflect expected species passability (transport) through different gradient strata. The 2000 revision also added data for searun cutthroat trout and bull trout/Dolly Varden.

[9] Fish bearing stream criteria were updated in the 2000 and 2009 revisions, mainly to reflect changes in the Washington Forest Practices Board stream typing rules in Chapter 222-16 of the Washington Administrative Code.

[10] See pages 100-102 in Exhibit B to the Declaration of Robert Barnard, P.E. (Bates Nos. USFHWA/SUPP 002440 – USFHWA/SUPP 002442).

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on this *27th* day of March, 2009, at Olympia, Washington.

s/Michael R. Barber
MICHAEL R. BARBER

EXHIBITS TO THE DECLARATION OF MICHAEL R. BARBER

Exhibit A
Resumé of Michael R. Barber

Exhibit B
Interagency Agreement No. GCA5236 between the Washington State Department of Transportation and the Washington Department of Fish and Wildlife (June 2007) (Bates Nos. F00070366 – F0007044), and Supplement No. 1 (November 2007) (Bates Nos. F0007056 – F0007057)

Exhibit C
Table "WSDOT and WDFW barrier culverts unaffected by additional upstream or downstream barriers" (extracted by Brian Benson from the Fish Passage and Diversion Screening Inventory database on March 25, 2009)

Exhibit D
WSDOT Fish Passage Barrier Scoping Summary Report for SR 16, Milepost 28.10 (December 17, 2007), prepared by WDFW Scoping Biologist Susan Cierebiej

Exhibit E
WSDOT Culvert Scoping Report for SR 16, Milepost 28.10 (March 20, 2007), prepared by WDFW Engineer Bob Barnard (Bates No. CD F0008102, folder SR 16 MP 28.1)

Exhibit F
WDFW Habitat Program Ten-Year Capital Plan, December 2008 (Bates Nos. F0006886 – F0006888)

Exhibit G
WDFW 2009-2011 Ten-Year Capital Plan, Agency Request vs. Governor Proposed as of December 19, 2008—Commission Presentation January 9, 2009 (Bates Nos. F0009769 – F0009794)

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding 01-1 (Culverts) ADDENDUM TO THE DECLARATION OF MICHAEL R. BARBER IN LIEU OF DIRECT TESTIMONY

I, MICHAEL R. BARBER, declare as follows:

31. On March 27, 2009, I executed a Declaration of Michael R. Barber in Lieu of Direct Testimony in *United States v. Washington* Subproceeding 01-1. In Paragraph 6, I summarized the fish passage work that the Washington Department of Fish and Wildlife (WDFW) has done for the Washington State Department of Transportation (WSDOT) under a series of contracts. In Paragraphs 21 through 26, I described the work that WDFW has done to identify fish passage barrier culverts on WDFW-owned lands, and WDFW's plans to fix them. I submit this Addendum to update that information. The paragraphs in this Addendum are numbered sequentially to follow those in my March 27,2009 Declaration.

32. In Paragraph 6 of my March 27, 2009 Declaration, I stated that WDFW has been performing fish passage work for WSDOT since 1991 under a series of contracts, and I attached a copy of the contract for the 2007-2009 biennium. In June 2009, WDFW and WSDOT executed a new contract for the 2009-2011 biennium. It took effect on July 1, 2009. A copy of the 2009-201 1 contract is attached as Exhibit H.

33. In Paragraph 8 of my March 27, 2009 Declaration, I stated that WDFW expected to complete habitat assessments for fish passage barrier culverts in the entire state highway system by mid-2015. At this time, I estimate that, with three crews, WDFW will be able to complete habitat assessments for WSDOT fish passage barriers in the *United States v. Washington* Case Area by January 2013. At this time, it is difficult to make a reliable estimate of the completion date for habitat assessments in Eastern Washington. Our very rough estimate is that WDFW will be able to complete all habitat assessments for the entire state highway system by August 2017.

34. In Paragraph 22 of my March 27,2009 Declaration, I stated that my staff had found 73 culverts that block fish passage on WDFW lands within the *United States v. Washington* Case Area. My staff has now determined that two of those 73 culverts are not in fish-bearing streams. The following table shows the current status of culverts that block fish passage on WDFW lands within the Case Area.

Fish Passage Barrier Culverts on WDFW Lands Within the *United States v. Washington* Case Area			
Culverts that block > 200 meters of salmon and steelhead habitat	Culverts that block > 200 meters of nonanadromous fish habitat	Culverts that block ≤ 200 meters of fish habitat	Total
51	3	17	71

35. When I prepared my March 27, 2009 Declaration, the 2009 Washington legislative session was still underway, and the Washington Legislature had not yet enacted a capital budget for the 2009-2011 biennium. The Legislature has now done that. The Legislature appropriated less for culvert repair on WDFW-owned lands than WDFW requested. Attached as Exhibit I is a char comparing the capital funds that WDFW requested, the capital budget that Governor Gregoire proposed, and the 2009-2011 capital budget that the Legislature enacted for WDFW.

36. In Paragraph 24 of my March 27, 2009 Declaration, I referred to the WDFW Habitat Program Ten-Year Capital Plan as of December 2008, which I attached as Exhibit F. I have now revised the ten-year plan to reflect WDFW's capital budget for 2009-2011. The culvert projects that WDFW had planed to conduct on its lands during the 2009-2011 biennium have been postponed to later biennia. The WDFW Habitat Program Ten-Year Capital Plan as of July 2009 is attached as Exhibit J.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on this *6th* day of July, 2009, at Olympia, Washington.

s/Michael R. Barber
MICHAEL R. BARBER

EXHIBITS TO THE ADDENDEUM TO THE DECLARATION OF MICHAEL R. BARBER

Exhibit H
Interagency Agreement No. GCA6019 between the Washington State Department of Transportation and the Washington Department of Fish and Wildlife (June 2009) (Bates Nos. F0014545 - F0014555)

Exhibit I
WDFW 2009-2011 Capital Budget (Bates No. F0014982)

Exhibit J
WDFW Habitat Program Ten-Year Capital Plan, April 2009 (Bates No. F0014558)

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Exhibit C. WSDOT and WDFW barrier culverts
barriers. These culverts represent barriers to
of potential habitat gain within

Site ID	Road	Stream	Tributary To	WRIA
990148	US 101	Fisher Cr	Queets R	21.0018
990400	US 101	Steamboat Cr	Pacific Ocean	20.0574
990178	US 101	Harlow Cr	Queets R	21.0134
982712		Hurd Cr	Dungeness R	18.0028
990606	SR 542	Chain-up Cr	NF Nooksack R	1
993679	US 101	unnamed	Hoquaim R	22
990187	SR 542	Hedrick Cr	Nooksack R	1.0463
990450	SR 106	Twanoh Falls Cr	Hood Canal	14.0134
994799	US 12	unnamed	Chehalis R	22.0542
990385	SR 108	Skookum Cr	Skookum Inlet	14.002
990151	SR 530	Fortson Cr	NF Stillaguamish R	5.0254
990731	US 101	unnamed	Stevens Cr	22.0064A
991066	SR 8	unnamed pond	Wildcat Cr	22
991606	US 101	Schaerer Cr	Hood Canal	16.0326
990395	SR 3	Spring Cr	Hood Canal	15.0364
991244	SR 106	unnamed	Skokomish R	16.0002
990246	SR 530	Little French Cr	Fortson Cr	5.0253
997787	SR 109	unnamed	Pacific Ocean	21.0727
992344	SR 9	unnamed	Black Slough	1
991559	SR 302	unnamed	North Bay	15.0001
991266	SR 109	unnamed	Pacific Ocean	21
991271	SR 109	unnamed	Pacific Ocean	21.0716
993702	US 101	unnamed	WF Hoquiam R	22
991716	SR 203	unnamed	Snoqualmie R	07.0219A
991690	US 101	unnamed	Stevens Cr	22

unaffected by additional upstream or downstream anadromous salmon that have >200 lineal meters WRIA's 1-23 as of March 25, 2009.

PI	Survey Date	Spawning Area (m^2)	Rearing Area (m^2)	Lineal Gain (m)	Owner
29	1/30/2007	9836	12568	5132	WSDOT
27.53	4/4/1996	25322	26208	7434	WSDOT
25.68	4/12/1995	16231	16925	5525	WSDOT
19.23	9/18/2008	103	1967	717	WDFW
17.41	11/18/2005	370	491	276	WSDOT
17.35	4/18/2002	0	4450	323	WSDOT
16.63	3/10/1992	159	576	551	WSDOT
16.37	11/17/2008	4104	3193	3059	WSDOT
16.04	11/26/2005	1494	3548	3293	WSDOT
15.9	6/18/2007	811	1537	490	WSDOT
15.37	3/21/2006	860	1391	1030	WSDOT
14.44	11/15/1996	485	3052	1162	WSDOT
14.17	5/22/2002	0	4339	418	WSDOT
13.4	12/2/2003	542	580	250	WSDOT
13.37	7/7/2000	1094	1578	1441	WSDOT
13.03	12/16/1993	405	678	437	WSDOT
12.47	12/20/1995	1137	821	996	WSDOT
12.26	10/25/2007	658	2389	1937	WSDOT
11.83	8/23/2005	0	1053	665	WSDOT
11.44	1/27/1994	232	576	483	WSDOT
11.36	5/17/1995	599	548	482	WSDOT
11.07	1/21/1993	1239	1482	816	WSDOT
11.02	12/7/2005	15	1098	1037	WSDOT
10.96	9/8/1995	320	725	421	WSDOT
10.83	10/13/2008	33	2848	972	WSDOT

991265	SR 109	unnamed	Pacific Ocean	21.0764
991731	SR 112	unnamed	Green Cr	19
990957	US 12	unnamed	Higgins Slough	22
991063	SR 8	unnamed	Cloquallum Cr	22
991261	US 101	unnamed	Pacific Ocean	20.0000A
990656	SR 510	unnamed	McAllister Cr	11.0328
990084	SR 7	Coal Cr	Roundtop Cr	11.0168
991647	US 101	unnamed	Hoh R	20
993698	US 101	Unnamed	WF Hoquiam R	22
991574	US 101	unnamed	Dowans Cr	20.0248A
991516	SR 16	unnamed	Burley Cr	15
991911	US 12	unnamed	Higgins Slough	22
991239	SR 302	unnamed	Case Inlet	15
995521	SR 116	unnamed	Port Townsend Bay	17
990921	SR 109	unnamed	Grays Harbor	22
991592	US 101	Hell Roaring Cr	Hoh R	20.0441
991910	US 12	unnamed	Higgins Slough	22

10.52	5/18/1995	0	1948	500	WSDOT
9.81	9/19/1995	287	305	418	WSDOT
9.67	5/28/2008	323	421	858	WSDOT
9.5	5/15/2002	0	656	234	WSDOT
9.19	6/9/1994	242	572	277	WSDOT
9.18	3/28/1997	0	1790	1449	WSDOT
8.86	7/7/1995	484	1394	1101	WSDOT
8.72	2/4/1997	158	578	853	WSDOT
8.62	10/15/2008	20	122	240	WSDOT
8.24	2/5/1997	268	1585	677	WSDOT
8.04	9/8/1994	186	308	817	WSDOT
7.82	6/2/1995	226	378	300	WSDOT
5.01	10/13/2004		63		WSDOT
4.71	12/11/2007	34	49	240	WSDOT
4.23	10/15/2008	0	190	366	WSDOT
3.01	5/15/2008	156	361	466	WSDOT
1.52	6/27/2002	26	133	200	WSDOT

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
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UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF JEFF CARPENTER, P.E. IN LIEU OF DIRECT TESTIMONY

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I, Jeff Carpenter, P.E., declare as follows:

1. I am a citizen of the United States, over the age of 18 years, and I am competent to testify as a witness. The statements in this declaration are based on my personal knowledge and upon my review of official public records.

INTRODUCTION

2. I am the Project Control and Reporting Director for the Washington State Department of Transportation (WSDOT). In my current position, I am required to have knowledge of WSDOT's budget in terms of revenue and expenditures. I have held my current position since February 2008, and on several occasions I have been asked to make budget presentations to members of the Legislature and legislative staff. During those presentations, I explained WSDOT's revenue sources and its expenditures.

3. Serving as the Director, I monitor the funding and expenditures for all capital projects, approve all changes to scope, schedule, and budget of projects, and provide project progress reports to WSDOT executives and external customers. I regularly work with WSDOT's Systems Analysis and Program Development Office to provide feedback on proposed changes to projects. I also assist in the preparation and assessment of projects within the biennial budget request to the Legislature.

4. Prior to this position, I worked for 17 years in managerial positions at WSDOT varying from the assistant design project engineer for the Olympic Region to the Project Director responsible for

overseeing the design and construction of bridge projects with budgets of hundreds of millions of dollars. Through these positions I gained experience with WSDOT's revenue sources and budget limitations from the project level to the agency-wide programmatic level.

5. The exhibits attached to this declaration are true and correct copies of records kept in the ordinary course of official public business, or are accurate summaries of voluminous public data. As the Director, I am one of the custodians of public records within my section.

GENERAL FACTORS AFFECTING WSDOT CULVERT REMEDIATION

6. There are three broad factors that affect how quickly WSDOT is able to implement its plans to remediate culverts that block or impede fish passage. These factors are a) funding, b) the availability of qualified contractors/work forces, and c) the "fish window" for performing construction work in a particular stream. This declaration will focus on the WSDOT budget and the funding for culvert remediation.

7. The State of Washington has recognized the impact of the transportation infrastructure on the environment for many years. This includes the impact on fish caused by culverts that impair or block the passage of fish. Years before this lawsuit was filed, WSDOT had established a budget line item specifically targeting culvert remediation. This budget item has been included as a permanent line item within the environmental retrofit category referred to as the I-4 budget since 1991. WSDOT has

been and continues to be a leader in the nation among transportation agencies in dedicating efforts to remediate transportation impacts on fish.

8. The WSDOT budget currently is experiencing significant shortfalls in available funds, as are other government functions. The revenue dedicated to transportation needs that is generated from State sources (primarily the State gas tax and various licensing fees) for FY 2009-2011 is currently projected to be $965 million less than what is necessary to fund the anticipated obligations of WSDOT. The severe revenue shortfall will compel the Legislature and WSDOT to make significant cuts to a wide variety of programs. As discussed in more detail below, one source of funding for culvert remediation by WSDOT is through a portion of its environmental budget known as the I-4 budget. The Governor has proposed $17.9 million for culvert remediation in the FY 09-11 I-4 budget. This would constitute an increase for that budget at a time when many other programs are being reduced or eliminated.

WSDOT REVENUE AND DISTRIBUTION

9. The combined total of all WSDOT revenue sources, both state and federal, for FY 09-11 is $5.271 billion. WSDOT's expenditures (its "budget") are divided between the operating and capital budgets. Attached as Exhibit A, is a chart summarizing the organization of the WSDOT budget.

10. The overwhelming majority of the budget (more than 85%) is dedicated to specific obligations by law, and WSDOT has no discretion to vary the percentage of its budget that is so dedicated.

For example, the state Legislature frequently identifies specific projects to be built with gas tax revenue as it did with the 5 cents per gallon "Nickel" tax and the 9.5 cent per gallon Transportation Partnership Act (TPA) tax. WSDOT cannot spend the revenue from those taxes on any projects other than those that have been specified by the Legislature.

11. The revenue from the state's 37.5 cents per gallon gas tax is the primary source of transportation money raised by the state. The anticipated amount of revenue from the gas tax is down from previous years' receipts because less gasoline is being consumed. Even if the State were to receive more revenue from this source than is anticipated, the gas tax is insufficient to pay for all of the demands placed on the transportation system.

12. Funding from the federal government will account for 16% of WSDOT" s revenue in FY 09-11. 60% of the funding received from the federal government comes with specific restrictions on use of the funds and is unavailable for culvert remediation. Most federal funding for Washington State capital highway projects arises from the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This is a federal trust fund. As its name implies, the Act seeks to address transportation safety issues on all projects and the scope of work and designs are prepared with safety in mind. These funds are unavailable for repairing culverts. The SAFETEA -LU trust fund will be exhausted in 2009. It is unclear how major safety projects will be funded in the future.

13. Another example of restricted federal funding came in early 2009 as part of the American Recovery and Reinvestment Act (ARRA). The federal government conditioned the release of ARRA funding to only projects which were "shovel ready." That term is generally defined as a project which has the design and environmental permitting complete, all right of way purchased and is able to be advertised for bid within 360 days of disbursement of the funds. Because of the "shovel ready" requirement, projects requiring extensive environmental permitting (such as culvert remediation) are unlikely to meet the federal stimulus requirements. Projects that include replacement of fish passage barriers have historically required at least two years to reach bid advertisement. This amount of time is needed because of the time required for property acquisition and environmental permitting. WSDOT does not have culvert projects that would qualify for ARRA funds.[1]

14. The amount of funding available to WSDOT for FY 09-11 that does not come with a specific mandate for how the money must be spent is approximately $600 million. Although these funds are not mandated for specific projects, WSDOT is required to spend the funds in accordance with legislative

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[1] In a situation where WSDOT has a highway construction project that will also remediate a culvert and the construction project qualifies for ARRA funds, then it would be possible that some ARRA funding would be used for culverts.

priorities for the broader mission of WSDOT. These priorities are defined for WSDOT through the budgeting process.

15. The funds that are not restricted to specific projects or activities must be used to fund the following broad categories of WSDOT responsibilities: maintaining the condition of the pavement for 20,250 lane miles of roadway; safety and preservation of 3,600 bridges and elevated structures on the state system; maintaining the facilities of the existing infrastructure; snow and ice removal; paying for the electrical system to light the roadways at night and to operate traffic control devices; environmental retrofit; congestion relief; and unanticipated emergencies.

16. WSDOT assists the Legislature by prioritizing projects according to the policies of improving safety, maintaining the current infrastructure, and making improvements to the system. Every biennium, WSDOT submits a list of projects and activities prioritized according *[sic]* the policies described above and to the category of highway needs with a recommended investment amount for each category. The Legislature ultimately determines the prioritization for any funds that are not mandated for specific projects and activities.

17. There have never been sufficient funds to pay for all of the activities and projects on the prioritization lists submitted to the Legislature by WSDOT. The activities and projects are performed in the order of the priority established by the Legislature. WSDOT will work as deeply down the priority lists as the available funding allows. With the legislative session still underway, it is unknown how

much will be funded and what changes to prioritization the Legislature will make.

18. The prioritization of the non-dedicated funds is a zero-sum budget exercise. That is, if funding is used for a particular purpose, that necessarily means that other needs will have less funding or may have to be eliminated. Currently many critical statewide transportation activities are significantly underfunded or have been postponed. For example, there are numerous major maintenance projects that are being deferred due to lack of available funds such as a growing list of steel bridge painting (currently 55 bridges - $170 million), aging pavements not being addressed (currently 550 lane miles - projected to be over 1,500 by the end of 2011), bridge deck rehabilitations (60 bridge decks - $70 million), and bridge deck replacements (35 bridges - $547 million).

19. More worrisome is the fact that important safety projects are being deferred due to lack of funding. For example, SR 101 near Shelton needs additional rumble strips and SR 195 near Cheney has a potentially dangerous at-grade intersection. SR 9, SR 291, and SR 302 also have pressing safety projects for which there is no available funding.

INCREASING CONSTRUCTION COSTS AND DECREASING REVENUE

20. Much of WSDOT's current revenue problems are the result of two trends-increasing construction costs and decreasing revenue. During the last five years inflation for transportation related construction increased by 60%. This rate of inflation results in a significant reduction in the purchasing

power of transportation funds. The increase in inflation was the result of a high demand for construction materials and oil-based products, such as asphalt and oil used for repaving projects. High oil prices also eventually led to a significant reduction in the number of miles driven by motorists with a corresponding reduction in the amount of gas tax collected. Since the gas tax is not indexed to inflation, WSDOT's gas tax revenues are in a constant state of decline compared to WSDOT's costs. During the past year, both the federal and state governments reduced their budget appropriations for transportation agencies in order to align with these reduced revenues.

THE MAINTENANCE ACCOUNTABILITY PROGRAM

21. In 1998, the Legislature established a Maintenance Accountability Program (MAP) for WSDOT. The MAP program establishes specific performance goals for WSDOT. The background and requirements of the MAP program can be reviewed at http://www.wsdot.wa.gov/maintenance/pdf/MAP_Manual2008.pdf. The Legislature uses the MAP program to determine whether additional funding is needed to meet the maintenance and operation objectives set by the Legislature.

22. Due primarily to declining revenue, WSDOT is unable to meet most targeted service levels in an acceptable fashion. Exhibit B is WSDOT's MAP report card from 2004 - 2008. There is currently an $85 million backlog of maintenance projects. The affects of deferred maintenance are captured by the

attached photograph of a bridge in Washington. Exhibit C.

IMPROVEMENT AND REMEDIATION PROJECTS

23. Improvement projects are aimed at correcting specific deficiencies within the transportation system or network such as high accident locations and particularly congested corridors. The budget designations for the four improvement programs are I-1 (Safety), I-2 (Mobility), I-3 (Economic Initiatives) and I-4 (environmental retrofit). As noted above, the I-4 budget is one of the sources for funding culvert remediation.

- **I-1 (Mobility).** Generally, mobility projects are projects which are designed to reduce congestion problems. At present, no gas tax revenue is available for new mobility projects. As a result, congestion relief projects such as corridor extensions for SR 509 and SR 167 are indefinitely postponed.
- **I-2 (Safety).** WSDOT is focused on implementing a plan called Washington's Highway Safety Plan/Target Zero which has a goal of achieving zero highway fatalities accompanied by significant reductions in serious collisions within twenty years. The projected amounts available for safety projects will decrease from $244 million in FY 07-09 to $150 million in FY09-11.
- **I-3 (Economic Initiatives).** This is an evolving category of transportation need and there is a great deal of interest in determining

how transportation investments can create job growth in Washington State. Despite the growing demand and timeliness of economic initiatives, WSDOT anticipates that it will be requesting no funding for this category of programs over the next 10 years. The I-3 budget represents an entire category of funding that has essentially been prioritized out of existence.

- **I-4 (Environmental Retrofits).** As explained in the Declaration of Paul Wagner, when the I-4 budget was created in the early 1990s, the fish passage barrier retrofit program was the first program that attempted to address environmental conditions by providing a dedicated funding source. Since the inception of the I-4 category, WSDOT has added several other dedicated funding programs to the I-4 environmental retrofits category: chronic environmental deficiencies (CED), stormwater, noise barriers, and habitat connectivity.

24. In addition to the fish passage retrofit barrier program, both the chronic environmental deficiencies (CED) program and the stormwater retrofit program provide benefits to fish survival. Chronic environmental deficiencies are locations along the state highway system where recent, frequent, and chronic maintenance needs are causing impacts to fish and fish habitat. An example of a CED is erosion of a road prism from a stream close to state highway. To address this safety problem, formerly WSDOT would fill the area with large rock or other material. However, that practice could damage aquatic habitat. Through the CED retrofit program,

WSDOT is often replacing this material with rough woody structures and incorporating other biologically-sensitive techniques to stabilize the road prism and to aid stream habitat. These techniques are designed to address long-term habitat needs of salmon and other organisms while eliminating the need for repetitive maintenance.

CULVERT REMEDIATION

25. WSDOT-owned culverts that are fish passage barriers are remediated through two different funding structures. First, fish barriers can be remediated as part of a capital construction project when the barriers fall within the boundaries of a highway construction project. This funding comes from the capital construction budget. Second, fish passage barriers can be addressed with funding from the WSDOT I-4 budget. Exhibit D shows the history of funding for the I-4 budget. The chart also illustrates the amount requested by WSDOT and the amount appropriated by the Legislature.[2]

26. Exhibits E and F chart the number of blocking culverts that have been repaired through construction projects and through the I-4 budget. Exhibit G is a chart showing the potential lineal habitat gained through barrier corrections through 2008.

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[2] The amount spent on culvert remediation in the course of a capital construction project is not tracked separately within the construction budget. For example, there would be a total budget for concrete but the amount of concrete used for the culvert work would not be segregated.

27. As the purchasing power of available revenue for new preservation and improvement in the Highway Construction Program has declined by between 35% and 45% over the last several years, WSDOT recommended increases in the funding for fish barrier inventory and replacement. At the same time, WSDOT increased the reach of the I-4 program by creating the Chronic Environmental Deficiency program. Habitat improvements for fish and investments in this category are on the increase at locations such as the Snoqualmie River at Fall City, the Hoh River south of Forks, the Sauk River near Darrington, the Nooksack River and Red Cabin Creek on US 20 near Rockport.

28. WSDOT also implemented the stormwater retrofit program within I-4 to improve the quality of water and reduce the velocity of water that was running off state highways into fish bearing streams. The WSDOT has also begun building a habitat connectivity program for wildlife with its' first project about to go construction and another ready to start design.

29. The FY 09-11 budget for I-4 has not been finalized at the time this declaration has been submitted. The Governor has proposed $17.9 million for the fish barriers in the I-4 budget. The Senate and House have both proposed $15.07 million for fish barriers in the I-4 budget. The budget reconciliation process will resolve this discrepancy, and I am assuming that the final budget will be somewhere within the range defined by these proposals.

30. The current budget proposals and projected budgets for I-4 and specifically for fish

passage barriers is attached. Exhibit H. Based on current revenue projections the future budgets for I-4 and for fish barriers is predicted to decline along with the rest of the transportation budget. The effect of the zero-sum situation can be seen within the budget projections for I-4. Historically, the line item for fish barriers has been 30% of the I-4 budget. Budget projections show fish barriers increasing to 50% of the I-4 budget. This increase is coming at the expense of the other environmental efforts of WSDOT in the I-4 budget.

CONCLUSION

31. WSDOT receives a limited amount of money to operate, improve, and maintain the State's transportation system. The vast majority of funding comes to the agency with specific restrictions on how the money can be spent. As described above, the demands on remaining funds dramatically exceed the amount that is available. The prioritization of scarce resources is done carefully and represents a delicate balance of competing interests.

32. Increasing the funding for culvert remediation would necessarily mean other important projects would be shorted to an even greater degree. WSDOT is dedicated to reducing the impact of the transportation system on salmon, but salmon is only one of the many important demands that the agency is required to fulfill. Within the limits of available resources, WSDOT is doing the best it can to fix culverts that are barriers to fish passage.

I declare under penalty of perjury that the foregoing is true and correct.

DATED the *3rd* day of *April* 2009.

s/Jeff Carpenter
JEFF CARPENTER, P.E.

EXHIBITS TO THE DECLARATION OF JEFF CARPENTER, P.E.

Exhibit A

Chart -- Governor's Proposed FY 2009-11 Operating and Capital Budgets for WSDOT

Exhibit B

WSDOT's MAP report card from 2004 - 2008.

Exhibit C

Photograph of bridge - deferred maintenance

Exhibit D

I-4 Budget History of Funding

Exhibit E

Chart -- "WSDOT Barrier Corrections Numbers Per Year"

Exhibit F

Chart -- "Cumulative View of WSDOT Barrier Corrections"

Exhibit G

Chart -- Potential Lineal Habitat Gain 1991 - 2008

Exhibit H

Current budget proposals and projected budgets for I-4 and specifically for fish passage barriers

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding No. 01-1 (Culverts) ADDENDUM TO THE DECLARATION OF JEFF CARPENTER, P.E. IN LIEU OF DIRECT TESTIMONY

I, Jeff Carpenter, P.E., declare as follows:

INTRODUCTION

33. On April 3, 2009, I executed the Declaration of Jeff Carpenter, P.E., in Lieu of Direct Testimony in *United States v. Washington* Subproceeding 01-1. I submit this Addendum to update information.

34. In paragraph 26 of my April 3, 2009 declaration, I referenced and attached as Exhibits E and F charts showing the number of blocking culverts repaired through construction projects and through the I-4 program and the total number of corrections. Since that time, it was determined that the total number of fish passage barriers corrections was 225. Exhibits E and F attached to this Addendum have been amended accordingly and reflect the correct numbers. Paragraph 26 also referenced Exhibit G, a chart showing the potential lineal habitat gained through barrier corrections through 2008. This chart

has also been corrected to accurately reflect the correct amounts and is attached to this Addendum as Exhibit G.

I declare under penalty of perjury that the foregoing is true and correct.

DATED the 22 day of September 2009.

s/Jeff Carpenter
JEFF CARPENTER, P.E.

EXHIBITS TO THE ADDENDUM DECLARATION OF JEFF CARPENTER, P.E.

Exhibit E

Chart -- WSDOT Barrier Corrections Numbers Per Year

Exhibit F

Chart -- Cumulative View of WSDOT Barrier Corrections

Exhibit G

Chart -- Potential Lineal Habitat Gain 1991 - 2008

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding No. 01-1 (Culverts) DECLARATION OF PAUL J. WAGNER IN LIEU OF DIRECT TESTIMONY

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I, PAUL J. WAGNER, declare as follows:

I. Summary

1. I am the manager of the Washington State Department of Transportation (WSDOT) fish passage barrier correction program. For many years, WSDOT has recognized the need to provide fish passage at stream crossings. WSDOT has worked to correct fish passage barriers as part of highway improvement projects and through a separate dedicated-fund fish passage correction program. I

manage the dedicated-fund program and will describe it in this declaration, and my branch provides support to WSDOT regions in their work with transportation project development. Please refer to the Declaration of Allison Hanson for information about fish passage barrier corrections that occur as part of larger highway improvement projects. Through its dedicated-fund program, WSDOT has invested over $47 million dollars for the inventory, prioritization, and correction of high priority fish passage barriers since 1991, when concentrated efforts began. Those efforts, along with the correction of fish passage barriers in connection with highway improvement projects, have provided 232 barrier corrections and improved fish access to more than 754 miles of stream habitat in Washington State.

II. Witness Qualifications and Experience

2. I am the Biology Branch Manager in WSDOT's Environmental Services Office, a position I have held since 1993. I am the senior agency lead for implementing and complying with federal and state regulations related to biological resources, with an emphasis on fish passage, wildlife habitat connectivity, endangered species, wetlands, streams, and other aquatic habitats. I am responsible for four WSDOT programs, which include 25 full-time employees and about 16 seasonal positions. One of these programs, the Stream Restoration Program, includes WSDOT's dedicated-fund fish passage barrier correction program. I work with several national forums and work groups as part of the National Academies of Sciences, and other organizations, addressing the ecological effects of roads. I currently chair the International Conference

on Ecology and Transportation. I interact with many professionals involved with transportation and ecology in the United States and other countries, and I have spoken at educational seminars in the United States and Canada. I have over 20 years of experience as a professional biologist. My resumé is attached as Exhibit A.

3. I hold a Bachelor of Science degree in Natural History, which is a double major in Biology and Geology, from Juniata College in Pennsylvania. I started my career working on government projects related to endangered species conservation and wildlife studies. I joined WSDOT in 1990 as a biologist and was promoted to my current position as Biology Branch Manager in 1993.

4. The Biology Branch is a part of WSDOT's Environmental Services Office. That office coordinates WSDOT's agency-wide efforts to address environmental issues in its programs and projects, including fish passage, air quality, wetlands, stormwater management, hazardous materials, erosion control, wildlife migration, and historical and cultural preservation. WSDOT has about 250 full-time employees statewide who focus on environmental services. Many of them are biologists with substantial field experience. WSDOT's environmental efforts have received national recognition from the Federal Highway Administration, the National Association of Environmental Professionals, the American Council of Engineering Companies, and other organizations. For example, in 2003, FHWA presented WSDOT and its partners, including the Nisqually and Squaxin Island Tribes, with an Environmental Excellence Award for the Indian Creek Stormwater Treatment

Facility near I-5 in Olympia. My team and I have received several awards from the Federal Highway Administration, including a 2002 award for a fish passage project. A list of those awards is included in Exhibit A.

III. History of Washington State Highway Culvert Design

5. In my work as the WSDOT Biology Branch Manager, I have become generally familiar with culvert function and the history of culverts in the Washington State highway system. I have also spoken with Matthew J. Witecki, the WSDOT Chief Hydraulic Engineer, who is intimately familiar with culvert design methods. I have examined the declaration that Mr. Witecki filed in this Subproceeding in 2006 (Doc. No. 18553/288, filed August 14, 2006). The following paragraphs are based on my personal knowledge and what I learned from Mr. Witecki.

6. According to WSDOT's transportation data office, there are 7,044 centerline miles in the state highway system, managed by WSDOT. While these are some of the most well-known roads, they are only a small portion of those in the state. There are 83,432 miles of road under the jurisdiction of cities, counties, and others. Many Washington State highway culverts were installed decades ago. WSDOT used standard engineering methods when it installed them, but some culverts designed according to those methods are now considered to be partial or complete barriers to fish passage. In part, that is because fish passage criteria have evolved over time, and designs once thought to be passable are now known to block

fish passage under some circumstances, as described in the Declaration of Robert Barnard, P.E. Another reason that some culverts are now fish passage barriers is that streams are dynamic systems, and conditions at stream crossings can change and cause a passable culvert to become a barrier. Sometimes that happens slowly, over a long period of time, and sometimes it is triggered by certain high flow events. Culverts can become partial or complete barriers to fish passage when they do not adequately respond to change.

7. Culverts can impede fish passage because of excessive drops at the outfall ("perching"), excessive velocity inside the culvert, or inadequate water depth. Changes in the watershed can cause those conditions. In many Western Washington watersheds, forests have given way to suburban landscapes where falling rain meets roof, street, or parking lot instead of spongy soil. Those changes can increase the intensity of runoff entering a stream, which can increase water velocity in culverts. That can lead to scouring of the stream bed at culvert outfalls, high water velocity during high flows, and shallow water depths within or downstream of the culvert during periods of low flows. All of those conditions can block fish movement. Culverts can also become fish barriers due to structural failure or debris blockage.

8. Attached as Exhibit B are photos of several WSDOT-owned culverts which exemplify scour, velocity, and low flow problems. In my professional opinion, these culverts would not have been considered fish barriers when they were originally permitted and built.

9. Dating back to at least the 1960s, WSDOT has relied on a Federal Highway Administration (FHWA) publication entitled Hydraulic Engineering Circular #10 (HEC #10). The earliest version of HEC #10 in WSDOT's library is dated March 1965 (attached as Exhibit C). WSDOT used the procedures identified in the then-current version of HEC #10 as the basis for Chapter Three of the WSDOT *Hydraulics Manual* – "Culvert Design"— which relates to the use of hydraulic criteria for sizing culverts. The WSDOT manual contains the same culvert sizing charts and guidance originally set forth in HEC #10. It is my understanding that the protocols and techniques set forth in HEC #10 are generally accepted as the industry standard for the design of road culverts for hydraulic purposes.

10. Virtually all of the WSDOT culverts now identified as barriers to fish passage were designed according to the FHWA design standards promulgated in HEC #10. At no time has FHWA notified WSDOT that the federal design standards failed to provide fish passage or that culverts designed pursuant to the standards might violate treaty fishing rights.

11. In the early 1990s, the Washington Department of Fisheries (WDF) notified WSDOT that, in some circumstances, culverts designed according to the guidelines in HEC #10 failed to provide for adequate fish passage. A number of interagency meetings took place, and ultimately, WSDOT found WDF's position compelling and adopted the WDF fish passage culvert design standards as they were developed.

12. In 1999 and 2003, the Washington Department of Fish and Wildlife (WDFW) published new culvert design guidelines specifically intended to accommodate fish passage. A copy of the 2003 WDFW manual *Design of Road Culverts for Fish Passage* is attached to the Declaration of Robert Barnard, P.E. WSDOT has modified its *Hydraulics Manual* and training materials to reflect the WDFW's fish-friendly design methods. Attached as Exhibit D are excerpts from the current WSDOT *Hydraulics Manual.* Chapter Seven addresses fish passage.

13. In July 2007, the Federal Highway Administration published *Design for Fish Passage at Roadway-Stream Crossings: Synthesis Report.* It describes the state-of-the-art practice for fish passage, referencing Washington State for some leading examples. Excerpts of that report are provided as Exhibit E to the Declaration of Robert Barnard, P.E. I understand that FHWA has been working on a new Hydraulic Engineering Circular that would describe culvert design standards to accommodate fish passage. It is still in development and has not yet been published, but it is expected to reflect the information in the 2007 synthesis report.

IV. How WSDOT's Fish Passage Barrier Correction Programs Began

14. Before 1991, WSDOT corrected fish passage barriers when they were encountered as part of projects to improve highway safety and mobility, or when the culvert required work due to structural problems. No formalized fish barrier inventory

process existed. Professional judgment as part of permitting highway projects largely guided determinations of fish passability and the design of passage corrections. This meant corrections had to wait until a transportation need coincided with the location of a fish barrier, and a construction project was implemented that could include the barrier correction. This approach remains the only approach used by almost every other state in the country.

15. As described in the Declaration of Paul Sekulich, Ph.D., Washington State recognized that more needed to be done to address fish passage barriers. In December 1990, WSDOT entered into a Memorandum of Understanding ("MOU") with what is now known as the Washington Department of Fish and Wildlife (WDFW). The 1990 MOU is provided as Exhibit B to Dr. Sekulich's declaration. It sets out the agencies' process for working together to implement state laws for the protection of fish, including fish passage. As described in the Declaration of Allison Hanson and the exhibits accompanying it, the MOU has been updated several times. The current version was executed in 2008.

16. WSDOT's program for identifying and correcting fish passage barriers began in 1991, when the Washington State Legislature directed it to correct six known fish barriers during the 1991-1993 biennium. The 1991 legislation is attached as Exhibit C to the Declaration of Paul Sekulich, Ph.D. For the first time, WSDOT developed projects whose sole objective was to address environmental needs. The

amounts of $105,000 and $280,000, respectively, were allocated for the two years of the biennium for inventory and correction of fish passage barriers. In 1993, these "stand-alone" or "dedicated" fish passage projects formally became a separate program now referred to as the Environmental Retrofit Program, or "I-4" Program.

17. The stand-alone fish passage correction projects of the early 1990s led to the creation of a separate WSDOT program, with separate funds, to address a variety of environmental problems in the state highway system. Today, the I-4 Program has expanded to include stormwater treatment, stream habitat improvement, highway noise attenuation, and wildlife habitat connectivity, as well as fish passage.

18. To my knowledge, WSDOT's "stand-alone" fish passage correction program was the first among transportation agencies in North America to define transportation projects based on an environmental need. Oregon has since implemented a fish passage program modeled after WSDOT's, but otherwise it remains a unique approach.

V. The Current WSDOT Fish Passage Barrier Correction "I-4" Dedicated Fund Program

A. Introduction

19. WSDOT's fish passage barrier correction program is managed through close cooperation and partnership with WDFW. Before correcting a culvert,

WSDOT obtains information about the culvert which has been collected by WDFW. The program has three main areas of work: Inventory, prioritization, and correction. WDFW's share of that work is described in the Declarations of Paul Sekulich, Ph.D., and Michael R. Barber. I will describe WSDOT's share.

B. Inventory: Finding and Evaluating Culverts that Block Fish Passage

20. WSDOT funds staff at WDFW to inventory and prioritize fish barriers for correction. This effort has grown significantly over time as our understanding of the problem has increased. Since 1991, WSDOT has invested about $9 million for fish passage barrier inventory and prioritization. In the 2007-09 biennium, the funding for this work was over two million dollars. The 2007-09 funding agreement between WSDOT and WDFW is provided as Exhibit B to the Declaration of Michael R. Barber.

21. As explained in the Declaration of Paul Sekulich, Ph.D., the inventory has undergone several expansions. The first inventory focused only on salmon, in streams up to a 7% gradient, which was understood to be the extent of salmon use. The search for barriers in that inventory was completed statewide in May 1994. At that point, WDF had inspected 1,333 highway culverts at fish-bearing stream crossings and identified 340 barriers (either partial or complete) statewide.

22. As a result of the merger of WDF with the Washington Department of Wildlife, in 1995

WDFW expanded the scope of the fish passage program to include streams up to a 12% gradient, as steelhead and resident trout could swim up this steeper gradient. This constituted a significant increase in survey area, and the survey was expanded for the 12% gradient. Although the expanded survey was not yet complete, by June 1997, WDFW had inspected 1585 highway culverts at fish-bearing stream crossings and identified 509 barriers (either partial or complete) statewide.

23. In 1998 WDFW expanded the scope yet again to include streams up to a 20% gradient, in response to new rules of the Washington Forest Practices Board. WSDOT funded additional survey crews, but the scale of this expansion meant it would take over ten years – until fall of 2007 – before the statewide inventory would be complete.

24. The June 2008 *WSDOT Fish Passage Inventory Progress Performance Report* (attached as Exhibit E) shows that, since 1991, inventory crews have inventoried all 7,044 miles of the state highway system, inspecting 6,469 stream crossings, 3,185 of which were found to be fish-bearing streams. As of March 25, 2009, WDFW records show a statewide total for WSDOT of 1,878 fish passage barriers. Of those, 1,482 have at least 200 meters of fish habitat upstream. That is more than five times the quantity identified in 1994 when the survey was initially thought to be complete for salmon. The following table shows the current status in the *United States v. Washington* Case Area:

Fish Passage Barrier Culverts Within WSDOT Rights-of-Way In the *United States v. Washington* Case Area				
Culverts that block > 200 meters of salmon and steelhead habitat	Culverts that block > 200 meters of nonanadromous fish habitat	Culverts that block ≤ 200 meters of fish habitat	Culverts that block an unknown amount of habitat	Total
807	122	279	7	1,215

25. When WDFW inspects a culvert, it may determine whether the culvert is a partial or complete barrier to fish passage. For further explanation of WDFW's distinctions between a partial and complete barrier, see ¶ 16 of the Declaration of Paul Sekulich, Ph.D. Approximately 50% of the WSDOT fish passage barrier culverts statewide, as well as in the *United States v. Washington* Case Area, are considered partial barriers. They may impede fish of a certain size, for part of the year, or at certain stream flows. Partial barriers are still identified as fish passage barriers in WSDOT's program. A photograph of a partial barrier to fish passage is attached as Exhibit F.

26. If a culvert blocks fish passage, the next step is to determine how much habitat it blocks. If an initial assessment shows that the culvert blocks more than 200 meters of habitat, it gets put on the list for a more extensive habitat assessment under one of the methods described in WDFW's *Fish Passage Barrier*

and Surface Water Diversion Screening Assessment and Prioritization Manual (2000 version attached as Exhibit E to the Declaration of Paul Sekulich, Ph.D.). As described in the Declaration of Michael R. Barber, the habitat assessment process is labor intensive and still underway. WDFW currently has three crews working full time on these surveys. WDFW has conducted habitat assessments on approximately 34% of the WSDOT fish passage barrier culverts that block more than 200 meters of habitat in the *United States v. Washington* Case Area. WDFW's current projection for the completion of the habitat surveys is 2013 in the *United States v. Washington* Case Area and 2015 statewide.

C. Using the Fish Passage Priority Index to Decide Which Culverts to Fix First

27. To decide the order in which to fix the identified barriers, WSDOT uses several pieces of information. One of them is the Priority Index number assigned to the culvert by WDFW. For an explanation of the development of the Fish Passage Priority Index and how WDFW calculates Priority Index (PI) numbers, please refer to ¶¶ 21-28 of the Declaration of Paul Sekulich, Ph.D. Prioritization is an important part of the WSDOT program because the scale of the fish passage problem is large, corrections are expensive, and WSDOT wants to use its limited resources to provide the best benefit to fish.

28. The PI does incorporate a project cost variable, with projects grouped into three categories: less than $100,000, $100,000 to $500,000, and over $500,000. In the 1990s, that was a useful distinction for WSDOT. For the last several biennia, however, the

vast majority of the WSDOT correction projects have cost more than $500,000, so the cost variable generally has little or no influence on the PI calculation for WSDOT culverts today.

29. The value of the PI is most greatly influenced by the number of fish species present and the amount of fish habitat upstream of the culvert. Because habitat assessments have not been completed for all WSDOT fish passage barrier culverts, PIs have not been calculated for every fish barrier. In the absence of complete habitat assessment information, it is possible to create a Surrogate PI (SPI) using Geographic Information Systems (GIS) data. WDFW sometimes uses surrogate PIs to decide where to focus habitat assessment efforts before identifying projects for scoping. But the PI is considered more accurate and is used to help form the basis of programming decisions.

D. Scoping and Planning Fish Passage Barrier Corrections

30. Once fish passage barriers are identified and assigned Priority Index numbers, barriers with higher PIs undergo preliminary evaluation, or "scoping," to develop an agreed design concept to fix the culvert, with an estimated cost. Scoping starts several years before the completion of a detailed design. The scoping process begins when WDFW provides one or more conceptual designs to WSDOT that will meet fish passage needs at a particular site. Please refer to the Declaration of Michael R. Barber for a description of the initial scoping that WDFW conducts. An on-site "pre-scoping" meeting is then held to evaluate the specifics of the site, and to discuss

possible solutions. Attendees may include Tribes, local agencies, WDFW, and WSDOT. Cost estimates are developed for the correction design options. The final decision about which option to pursue is determined by agreement between WSDOT and WDFW.

31. WSDOT and WDFW have developed a stepwise process to help coordinate scoping and development of I-4 fish passage barrier corrections. A flow chart that depicts the I-4 scoping process is attached as Exhibit G.

32. When projects have been scoped, they can be proposed for funding and included for design and construction in WSDOT's Ten-Year Plan. Although culvert PIs are a key factor that informs the decision of how to sequence barrier corrections in the I-4 Program, the PI is not the sole factor considered. As described in the Declarations of Paul Sekulich, Ph.D., and Michael R. Barber, other factors are important, as well. The presence or absence of other barriers in the watershed carries weight, for example. Most WSDOT barriers with a PI greater than 20 and no other barriers in the watershed have already been fixed. The opportunities to work with other entities to fix several culverts or habitat problems at once can elevate a culvert's priority. For efficiency, WSDOT may fix several state highway culverts in a single project even though some may have low PIs. Constructability challenges, such as difficulty with right of way, access, or construction detours, can delay a project. For example, WSDOT must sometimes get permission to use city streets as a detour route while a culvert is constructed. Just today, I learned that, for two culvert projects that WSDOT expected to

construct in 2009, the City of Poulsbo has authorized WSDOT to use its streets as a detour route only if the work is done in 2010. Sometimes, projects are programmed to fit available funds. Some very high cost projects are delayed because they exceed the biennial budget. An example is the SR 3 crossing of Chico Creek, a Tributary of Dyes inlet in Kitsap County, which would require four bridges and is estimated to cost over $29 million to correct.

E. Designing, Constructing, and Paying For A Structure That Restores Fish Passage

33. Fish passage corrections in the I-4 Program are designed according to the guidance in the manual *Design of Road Culverts for Fish Passage*, which WDFW published in 2003 (Exhibit B to the Declaration of Robert Barnard, P.E.). Since 1992, WSDOT has fixed more than 70 high-priority fish passage barriers under the I-4 dedicated-fund program. WSDOT and WDFW publish annual reports describing the program and its newest completed projects. The most recent report, issued in June 2008, is attached as Exhibit E. Please see the Declaration of Jeff Carpenter for a description of the financial underpinnings of the program.

34. Approaches to fish passage design have evolved since the first I-4 corrections were constructed in the early 1990s, reflecting the advances in our understanding about the biological needs of fish as well as our experience over time with correction methods. WSDOT uses all three culvert design methods described in the WDFW culvert design manual: the hydraulic, no-slope, and stream simulation methods. Please see the Declaration of

Robert Barnard, P.E., for a description of these methods.

35. The hydraulic design method was the principal method used in the early years of WSDOT's I-4 Program. Today, WSDOT uses it primarily to retrofit existing culverts to improve passage without replacing the culvert with a new structure. Exhibit H includes photos of WSDOT culverts retrofitted with weirs or baffles. Weirs cause water to back up, while baffles interrupt its flow. Both devices slow the water velocity, which makes it easier for fish to get through. Because there are no expenses for excavation, new structure placement, or traffic control, such retrofits are economical to construct, but they can collect debris, become damaged, and require regular maintenance. For those reasons, their use has diminished in WSDOT's I-4 Program. Today, the hydraulic option is generally considered only where there are site-specific limitations, such as adjacent developed properties or very deep roadway fill, or where the cost for another type of correction would be many millions of dollars.

36. The cost of fixing a culvert using the hydraulic design option varies greatly depending on the situation. In the early 1990s, some hydraulic culverts were installed for under $50,000. In 2007, however, a hydraulic correction was constructed on SR 92 at Catherine Creek for $377,749.

37. In its current I-4 Program, WSDOT most often corrects fish passage barriers by replacing a barrier culvert with a new culvert designed under the no-slope or stream simulation methods. The Declaration of Robert Barnard, P.E., describes these

design methods. They provide a more natural and a wider span for high flows than does the hydraulic method, and they also allow for some channel movement. They provide fish passage by approximating natural stream conditions within the culvert. No-slope and stream simulation culverts also need less maintenance than hydraulic retrofit structures.

38. No-slope culverts have been a good option for WSDOT. They provide fish passage for all species at all flows, they require less maintenance than weirs and baffles, and they are generally less expensive than stream simulation culverts. No-slope culverts must be at least 1.25 times as wide as the channel bed, and WSDOT often designs them wider than that. State Route 112, along the Strait of Juan de Fuca west of Port Angeles, offers some examples of recent no-slope installations:

Recent No-Slope Culvert Installations on State Route 112			
Mile Post	**Stream**	**Year Constructed**	**Cost**
24.91	Unnamed tributary to Pysht River	2006	$647,773
32.02	Jim Creek	2004	$870,000
54.35	Bear Creek	2006	$666,151

The Jim Creek culvert is depicted in Exhibit H.

39. In some cases, the most expensive part of a culvert replacement project is excavation and traffic control, not the cost of the actual structure. In those cases, the stream simulation culvert design option is often selected even if it would cost a little more than a no-slope culvert. As described in the Declaration of Robert Barnard, P.E., WDFW's stream simulation design method is nationally recognized as the state of the art for culvert design. It provides passage for all fish species at all relevant flows, and allows for other ecological functions associated with streams. Most of the culvert corrections that WSDOT and WDFW are currently scoping use stream simulation designs. Examples of recent stream simulation installations are on SR 93 at Stevens Creek ($634,398, installed 2005), and a pair of culverts on SR 20 at Frazer Creek and Beaver Creek ($1,401,830, installed 2006).

40. WSDOT uses bridges when the stream simulation criteria would dictate a span of more than 20 feet. Bridges are also used for unconfined channels or highly dynamic stream systems. Bridges can provide benefits beyond fish passage, but they are also the most expensive fish passage barrier correction option. In 2004, a bridge was installed for fish passage on Tibbetts Creek under I-90 at a cost of $5,536,555. In 2005, a bridge was installed for fish passage on Skobob Creek on SR 106 at a cost of $1,731,000. Both bridges, and the culverts they replaced, are depicted in Exhibit I.

41. The cost of fish passage barrier correction projects has risen significantly over time. In the early 1990s, the I-4 Program started with projects that were more easily installed, and relied largely on retrofits of existing culverts. As the

program progressed, we have encountered more complex situations and relied on more extensive corrections, such as complete replacement. Inflation and rising materials costs have accelerated the increase in the cost of the program.

42. WSDOT has increasingly used full replacement for barrier culverts as the I-4 Program has matured. Of the 20 dedicated projects currently planned for design and/or construction in the 2009-2011 biennium, 17 are for stream simulation or bridge corrections. (See Exhibit J.)

43. The pace of WSDOT culvert corrections under the I-4 Program is affected by some non-monetary factors that WSDOT cannot control. One of those is state and federal regulatory agencies' seasonal timing restrictions for performing construction work in fish-bearing streams. For example WDFW currently allows construction work in Jimmycomelately Creek, a salmon-bearing stream in Clallam County, only during the month of August.

VI. WSDOT's Leadership in Fish Passage

44. When the WSDOT I-4 fish passage barrier correction program began in 1991, WSDOT had one Biologist in the Headquarters Design Office coordinating the work. Today, WSDOT has three Biologists and two Hydrologists in the Headquarters Environmental Services Office involved in this work. They work with WSDOT regional design offices and with WDFW staff in Olympia and regional offices.

45. WSDOT has supported research to increase our understanding of how best to provide fish passage at stream crossings and help reduce

transportation related effects to fish. Exhibit K lists research projects funded by WSDOT that were related to fish passage and fish protection. Two of those research projects are described in ¶ 49 of the Declaration of Paul Sekulich, Ph.D.

46. WSDOT's fish passage barrier retrofit program is among the most extensive efforts to address fish passage in the country and it is unique in several ways. Many states began to consider fish passage needs at their road crossings only in the last five years or so. Some are just beginning to inventory their culverts, using methods developed by WDFW and WSDOT as the basis for their inventory.

47. Washington has constructed more crossings specifically to accommodate fish passage than any other state in the United States. This was noted recently at page 18 of *Report 615: Evaluation of the use and Effectiveness of Wildlife Crossings*, published by the Transportation Research Board of the National Academies in 2008 (excerpts attached as Exhibit L).

48. In February 2006, FHWA hosted a Fish Passage Summit in Denver, Colorado. Representatives from many states attended, including staff from WSDOT and WDFW. Jon Peterson of my staff attended, and Robert Barnard of WDFW was one of the speakers. The efforts of several states were presented, which were modeled after parts of the Washington programs for inventory and correction. Many programs involved a less thorough inventory, less rigorous corrections standards, and no stand-alone or dedicated programs like WSDOT's I-4 Program, however.

49. The FHWA report *Design for Fish Passage at Roadway-Stream Crossings: Synthesis Report*, published in 2007, compiles information on the state of the practice for fish passage. The guidance developed in Washington for barrier inventory, as well as design of Stream Simulation and No Slope Culverts, are cited among the leading examples. Excerpts from this report are provided as Exhibit E to the Declaration of Robert Barnard, P.E.

VII. Conclusion

50. WSDOT has been proactive in addressing the need for fish passage. Through WSDOT's dedicated (I-4) fish passage program alone, the State of Washington has invested over $47 million for fish passage barrier inventory, prioritization, and correction since 1991. It has invested still more through other types of transportation projects. As depicted in Exhibits M and N, WSDOT has implemented 232 fish passage corrections, including 72 stand-alone corrections, improving access to over 754 lineal miles of stream habitat statewide. We have supported studies to improve our knowledge of fish passage and have revised our approaches to reflect new information. Our program is unique and nationally recognized for its leadership.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on this *2nd* day of April, 2009, at Olympia, Washington.

s/Paul J. Wagner
PAUL J. WAGNER

EXHIBITS TO THE DECLARATION OF
PAUL J. WAGNER

Exhibit A
Resumé of Paul J. Wagner (Bates Nos. T1013589-93)

Exhibit B
Three photos of velocity, scour, and low flow at WSDOT culverts, with figures showing the cost of correcting these fish passage barriers (Bates Nos. T1013764-66)

Exhibit C
Capacity Charts for the Hydraulic Design of Highway Culverts, Hydraulic Engineering Circular No. 10 (Bureau of Public Roads, March 1965) (Bates Nos. T1013767-854)

Exhibit D
Excerpts from *Hydraulics Manual*, M 23-03.01 (Washington State Department of Transportation, June 2007) (Bates Nos. T1013855-63)

Exhibit E
Washington State Department of Fish and Wildlife/ Washington State Department of Transportation, *WSDOT Fish Passage Inventory Progress Performance Report* (June 2008) (Bates Nos. T1001862 – T1002020)

Exhibit F
Photo of a partial fish passage barrier culvert under SR 8 at Wildcat Creek (Bates No. 1013864)

Exhibit G
I-4 Flow Chart (Bates No. T1002021)

Exhibit H
Eight photographs showing one fish-blocking culvert, three hydraulic design culverts, two no-slope culverts, a stream simulation culvert, and a bridge (Bates Nos. T1013865-72)

Exhibit I
Five pages of before-and-after photos of WSDOT fish passage barrier correction projects (Bates Nos. T1013873-77)

Exhibit J
Fish Passage Pre-Scoping List (January 7, 2009) (Bates No. T1013878)

Exhibit K
List of environmental research projects that WSDOT has sponsored (Bates Nos. T1013879-81)

Exhibit L
National Highway Cooperative Research Program 615: Evaluation of the Use and Effectiveness of Wildlife Crossings (Transportation Research Board of the National Academies, 2008), Cover page and Chapter 2 (Bates Nos. T1013882-97)

Exhibit M
Chart of WSDOT Barrier Corrections Numbers Per Year

Exhibit N
Chart of Cumulative View of WSDOT Barrier Corrections

The Honorable Ricardo S. Martinez

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, Defendant.	NO. C70-9213 Subproceeding No. 01-1 (Culverts) ADDENDUM TO THE DECLARATION OF PAUL J. WAGNER IN LIEU OF DIRECT TESTIMONY

I, PAUL J. WAGNER, declare as follows:

51. On April 2, 2009, I executed the Declaration of Paul J. Wagner in Lieu of Direct Testimony in *United Statse [sic] v. Washington* Subproceeding 01-1. I submit this Addendum to update information.

52. In paragraph 1 of my April 2, 2009 declaration, I stated that 232 barrier corrections had been completed since 1991 which improved access to more than 754 miles of stream habitat. Since that time, my staff determined that the correct number of corrections of fish passage barriers to be 225 with improved access of over 699 miles of stream habitat.

53. In paragraph 24 of my April 2, 2009 declaration, I referenced and attached as Exhibit E the 2008 *WSDOT Fish passage Inventory Progress Performance Report*. Since signing my declaration, the 2009 *WSDOT Fish Passage Inventory Progress Report*

was published and is attached to this Addendum as Exhibit O.

54. In paragraph 54, I stated that WSDOT has implemented 232 barrier corrections, including 72 stand-alone corrections, improving access to over 754 miles of stream habitat statewide. since that time, my staff determined that the correct number of corrections of fish passage barriers to be 225 (72 dedicated I-4 corrections and 153 corrections through other funding sources) improving access of over 699 miles of stream habitat. Exhibits M and N attached to this Addendum have been amended accordingly and reflect the correct numbers.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on this *22nd* day of July, 2009, at Olympia, Washington.

s/Paul J. Wagner
PAUL J. WAGNER

EXHIBITS TO THE ADDENDUM
DECLARATION OF PAUL J. WAGNER

Exhibit M
Chart of WSDOT Barrier Corrections Numbers Per Year

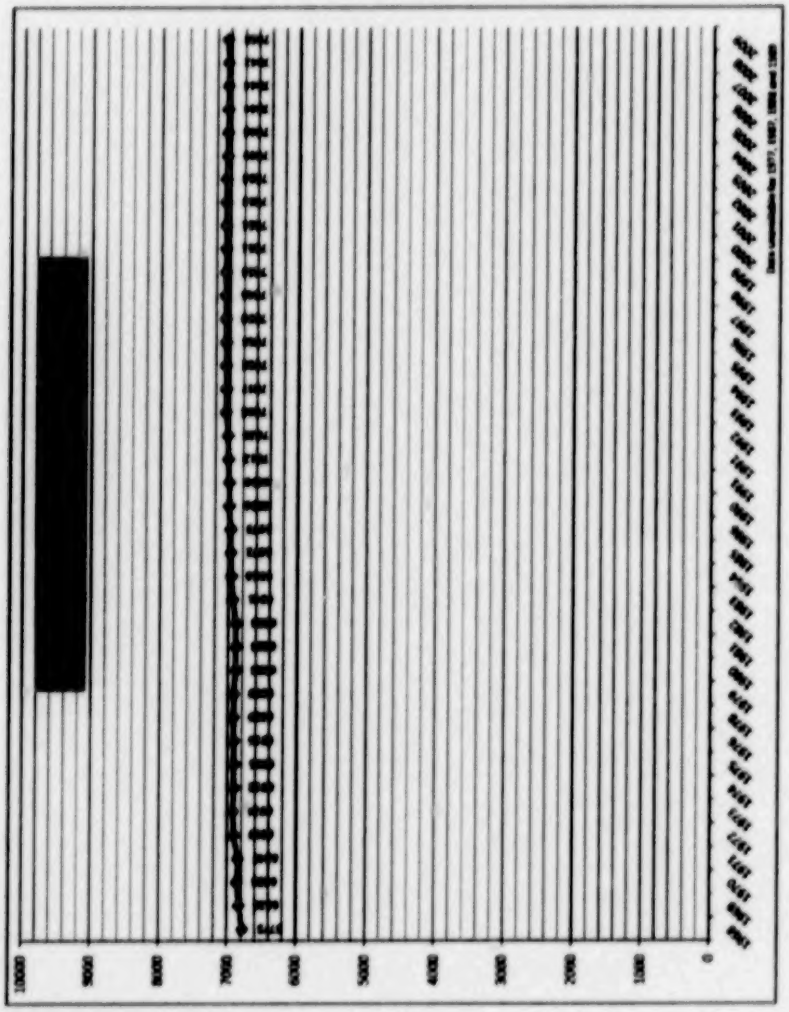
Exhibit N
Chart of Cumulative View of WSDOT Barrier Corrections

Exhibit O
Washington State Department of Fish and Wildlife/ Washington State Department of Transportation, *WSDOT Fish Passage Inventory Progress Performance Report* (July 2009) (Bates Nos. T1014085 – T1014252)

Case area summary of up and down stream barriers associated with the state owned barrier culverts used by Tyson Waldo to generate Table 1. Based on the revised list (315 of 348).		
Downstream	Upstream	Total
220	1370	1590

WRIA summary of the up and down stream barriers associated with the state owned barrier culverts (Base Culverts) used by Tyson Waldo to generate Table 1. Based on the revised list (315 of 348).			
WRIA	Base Culverts	DS Barriers	US Barriers
01	20	17	128
03	9	8	102
04	6	9	10
05	8	7	60
06	2		8
07	25	33	106
08	24	28	317
09	2	3	
10	9	11	65
11	3		16
13	1		14
14	10	4	41
15	44	30	162
16	12	6	8
17	19	17	78
18	9	10	39
19	15	2	77
20	27	11	22
21	16	1	9
22	44	12	85
23	10	11	23
Total	315	220	1370

WSDOT – Historical Center Line Miles
1868-2009



State's Exhibit W-188
Page 000001
Case No. 70-9213, Subproceeding 01-1

THE HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, vs. STATE OF WASHINGTON, at al. Defendant.	NO. C70-9213 Subproceeding 01-1 DECLARATION OF MIKE HENRY REGARDING PRE-FILED, WRITTEN DIRECT TESTIMONY

I, MIKE MCHENRY, declare as follows:

1. I was asked by counsel for Plaintiff Tribes in this sub-proceeding to testify as an expert witness on behalf of the Tribes.

2. As agreed to by the parties and ordered by the Court, my direct testimony is in writing. A true and complete copy is attached to this declaration.

Pursuant to 28 U.S.C. § 1746 I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

EXECUTED on this *10th* day of October, 2009 at *Pt. Angeles*, Washington.

s/Mike McHenry
MIKE MCHENRY

United States v. Washington
United States District Court
Western District of Washington
No C70-9213, Subproceeding 01-1 (Culverts)

Written Direct Testimony Of Mike McHenry
Habitat Program Manager
Lower Elwha Klallam Tribe
Witness For Plaintiff-Intervenor Tribes

Testimony Prepared March 27, 2009

Amended October 10, 2009

I. Introduction and Summary.

I have been asked to serve as a regional expert witness for the Washington treaty tribes on the culvert case. In that capacity I will provide my experiences in assessing watershed, habitat conditions and fish populations in Olympic Peninsula watersheds. Specifically, I will focus on the process of culvert inventory, assessments and restoration. I also provide examples of the ecological effects of culverts on stream habitat and fish populations based on my observations in watersheds of the Olympic Peninsula. The Olympic Peninsula contains watersheds that have significant potential to support anadromous fish. Many of these watersheds have been impacted by a variety of historic and ongoing land uses that have degraded and continue to limit those populations of anadromous fish important to Native American tribes. Those impacts include barriers caused by culverts under roads. The Lower Elwha Klallam Tribe operates a fisheries program with habitat assessment, monitoring and restoration capabilities. The Tribe uses a scientific process to identify and prioritize restoration projects at the watershed scale. As discussed below in Section IV below, the scientific literature recommends that restoration be conducted in a hierarchical fashion and at the watershed scale to achieve the maximum likelihood of success. The correction of human caused barriers is generally recognized as the second highest priority for restoring habitats used by Pacific salmon (following the protection of existing functional habitats). Specific methods are available to identify and prioritize culvert corrections and methods used by the Washington Department of Fish and Wildlife are

widely accepted. However, problems associated with the accuracy of existing data bases used to identify streams and culvert locations likely result in underestimation of total habitat affected. Limitations in agency budgets have historically constrained barrier culvert corrections and have forced managers to implement cost-effectiveness measures to determine prioritization for culvert barrier corrections. The correction of culvert barriers is particularly important in the Pacific Northwest as there are literally thousands of barriers. Correction of barriers to salmon migration often results in a rapid response by colonizing salmon and has been shown to quickly result in increases in juvenile and adult salmon.

II. Qualifications.

I hold a Bachelor of Science degree from Humboldt State University (Fisheries 1983) and a Masters of Science degree from New Mexico State University (Wildlife Science 1986). I am currently employed by the Lower Elwha Klallam Tribe as the fisheries habitat program manager. In that capacity I am responsible for a number of activities, including: 1) reviewing and determining the effects of land use activities on treaty protected fish and wildlife resources, 2) assessing watershed, habitat and fish population conditions, 3) identifying, designing and implementing restoration actions that will improve resource conditions for fish and shellfish, 4) conducting long term monitoring and research on habitat and biological populations, 5) managing program personnel, budgets, and grants necessary to support the habitat program and 6) participating in watershed planning and other processes to advance

protection and restoration of fish and wildlife resources. I have worked for the Tribe in this capacity since 1991. Previous to this position I was employed by the Northwest Indian Fisheries Commission, Idaho Department of Water Quality and the US Forest Service Intermountain Research Station in resource protection, fish population and fish habitat monitoring and research.

My background has given me broad experience in a number of areas pertinent to assessing the effects of watershed management on fish and their habitats including Pacific salmonids. I have twenty years of direct experience working in Olympic Peninsula watersheds that includes a variety of monitoring, assessment and research roles including the assessment, inventory and correction of fish passage barriers including those caused by culverts. I have conducted or have assisted with the inventories of culvert barriers on three Olympic Peninsula watersheds (Salt, Pysht, Clallam). I have also conducted numerous assessments at dozens of other watersheds in the states of Washington and Idaho. I have also been increasingly involved in management of watershed scale restoration efforts designed to improve fish habitats and watershed conditions. These projects include the correction of fish passage barriers by the replacement of barrier culverts with bridges and new passage structures that meet fish passage requirements. These barrier projects occurred in the Salt Creek, Deep Creek, East Twin River, Lyre River and the Pysht River watersheds. I am also intimately involved with planning for the removal of two dams on the Elwha River and the

subsequent restoration of native salmonid populations in that river drainage.

III. Olympic Peninsula Habitat Overview.

The Olympic Peninsula contains numerous watersheds supporting diverse populations of Pacific salmon. The largest watersheds radiate off the core Olympic Mountains which rise from sea level to over 7,800' in height at Mount Olympus and include the Hoh, Queets, Quinault, Elwha and Sol Duc rivers. The headwaters of these rivers have been provided federal protection by Olympic National Park (and its predecessors), since prior to statehood. Because of this level of federal protection, large areas of the Olympic Peninsula have been largely spared from the effects of development. Not surprisingly the watersheds with the greatest levels of federal protection generally support the highest populations and greatest diversity of Pacific salmon (McHenry et al. 1996)[1]. The Elwha and Skokomish Rivers are generally thought to be an exception to this rule as construction of mainstem hydroelectric dams without fish passage facilities on these rivers has dramatically affected their ability to produce anadromous fish.

Dozens of other salmon bearing watersheds of various sizes can also be found on the Olympic Peninsula. These also were historically productive for Pacific salmon and include lesser known watersheds such as Pysht, Quilcene, Morse, Dickey, Hoko and Ozette to

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[1] McHenry, M.L., J. Licatowich and R. Hagaman. 1996. Status of Pacific Salmon and their habitats on the Olympic Peninsula, Washington. Lower Elwha Tribe, Fisheries Department, Port Angeles, Washington.

name a few. Many of these watersheds drain outside of the federally protected central Olympics and have historically had little or no protection from impacts associated with historic land uses such as logging, agricultural development, urban development, and road construction, including culverts. These activities have generally degraded the productive capacity of Olympic Peninsula watersheds to produce Pacific salmonids and can be referred to as cumulative effects. Historic overfishing, fluctuations in marine survival from large scale climatic shifts and in some cases hatchery practices are thought to be other contributors in the reduction of Olympic Peninsula salmon and steelhead populations (McHenry et al. 1996; Hard et al. 2007[2]; Myers et al 1998[3]).

Ironically, despite its reputation as a haven for Pacific salmon, the Olympic Peninsula, like other regions throughout the Pacific Northwest, has suffered dramatic decreases in salmon production during the last century (McHenry et al. 1996). Indeed many populations have either been locally extirpated, are listed as threatened under the Endangered Species Act (ESA), or have declined to remnant levels. For example, Chinook salmon from the Pysht River and

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[2] Hard, J.J., J.M. Myers, M.J. Ford, R.G. Cope, G.R. Pess, R.S. Waples, G.A. Winnans, B.A. Berejikian, F.W. Waknitz, P.B. Adams, P.A. Bisson, D.E. Campton, and R.R. Reisenbichler. 2007. Status review of Puget Sound steelhead (*Oncorhynchus mykiss*). NOAA Technical Memorandum NMFS-NWFSC-81.

[3] Myers, J., R.G. Kope, G.J. Bryant, D. Teel, L.J. Lierheimer, T.C. Wainwright, W.S. Grant, F.W. Waknitz, K. Neely, S.T. Lindley, and R.S. Waples. 1998. Status review of Chinook salmon from Washington, Idaho, Oregon, and California. NOAA Technical Memorandum NMFS-NWFSC-35.

Morse Creek are locally extirpated (McHenry et al. 1996), while steelhead populations in the Elwha and Dungeness Rivers (Hard et al. 2007) and sockeye salmon from the Ozette (Gustafson 2007[4]) are threatened and federally protected.

Watershed assessment or watershed analysis is a scientific tool used to assess landscape and land-use factors that affect rivers and their watersheds (Beechie et al. 2002[5]). Watershed assessments may utilize various methodologies but ultimately can identify the cause of habitat change or loss as well as identify needed habitat protection and restoration actions. Several watershed analyses have been completed on Olympic Peninsula watersheds. While the results vary somewhat between watersheds, there are themes that are similar and repeat with regards to habitat conditions that affect Pacific salmon on the Olympic Peninsula. These include a suite of common impacts resulting from historic logging practices (which is far and away the most widespread land use effecting *[sic]* Olympic Peninsula watersheds) and other land use activities that include:

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[4] Gustafson, R.G., T.C. Wainwright, G.A. Winans, F.W. Waknitz, L.T. Parker, and R.S. Waples. 2007. Status review of Sockeye salmon from Washington and Oregon. NOAA Technical Memorandum NMFS-NWFSC-33.

[5] Beechie, T. J., G. R. Pess, E. M. Beamer, G. Lucchetti, R. E. Bilby. 2002. Role of watershed assessments in recovery planning for salmon. Pages 194-225 */in/* Montgomery, D. R., S. Bolton, D. B. Booth. (Eds.) Restoration of Puget Sound Rivers. University of Washington Press, Seattle, WA.

- Increases in delivery of fine sediment to stream channels
- Increases in peak flow hydrology delivered to stream channels
- Reductions in woody debris loading delivered to stream channels from riparian forests for maintaining habitat forming processes.
- Loss of access to historically accessible habitats including from the installation of culverts at road crossings that have failed to adequately pass juvenile and/or adult fish at all stages of flow.

Depending upon the results of the individual watershed analysis in question, factors from other contributing land uses have also been identified that have further reduced habitat conditions for Pacific Salmon. These land use impacts are generally detrimental as they act to reduce life stage survival of Pacific salmon by degrading water quality, spawning and rearing habitat. For example, fine sediment is known to reduce the survival of developing salmon eggs during the incubation stage of their life history. When more than one of these factors occurs the effect may be magnified and is in referred to as a cumulative effect.

Human caused barriers, such as those caused by culverts at road crossings, directly affect the productivity of a given watershed's salmon population. Improperly designed, installed or poorly maintained culverts can create physical conditions which may inhibit or prevent the passage of both adult and juvenile salmon. Excessive outfall drops and

excessive water velocities are typical mechanisms that may inhibit or prevent salmon migration to spawning and rearing habitats. Depending upon the location and severity of the blockage, a culvert barrier may completely eliminate access to salmon and cause local extirpation. In less severe cases (partial barriers) certain species or life histories may be excluded from historic spawning and rearing habitats.

Besides limiting access to habitats needed for salmon to complete their life histories, culverts may cause other undesirable impacts for fish and habitat forming processes that support them. Undersized culverts may prevent the natural transport of sediment and large wood necessary to support downstream habitats. During higher flows, culverts can "backwater" at their inlet because of insufficient transport capacity of the culvert itself. When this occurs stream velocity decreases and fluvially transported sediment and wood is typically deposited in the vicinity of the culvert inlet (Figure 1 & 2). This creates a maintenance problem; however the ecological implications to fish may be great. For example, Hammerquist Creek is a Pysht River floodplain tributary that has coho, steelhead and cutthroat trout spawning and rearing habitat. Hammerquist Creek drains through a small concrete culvert on State Highway 112 that is considered passable to fish. However it does not allow significant sediment passage (Figure 33 in Haggerty et al. 2006). Hammerquist Creek and its two associated wetlands provide overwinter habitat for thousands of coho juveniles that originate in other sections of the Pysht watershed. These fish access from the river during fall and winter high flows and exit as smolt in the

spring. During some spring smolt outmigration periods, the creek may completely dry up as the creek disappears (sub-surface) through the large volume of sediments that have accumulated upstream of the culvert. In the 2005, local landowners documented the loss of more than 1000 coho pre- smolts (Figure 34 in Haggerty et al. 2006) and successfully moved another couple of thousand to the river from isolated holes in the creek and the wetlands outlets. In 2005-2006, additional fish losses because of upstream culvert stranding were documented on other Pysht River tributaries (Haggerty et al. 2006). Interestingly culverts are rarely thought of as barriers to downstream migration.

Culverts on roads or stream crossings high in the watershed may also plug and fail catastrophically. They may also route water on over steepened slopes and generate landslides. Regardless, the impacts of these culvert generated catastrophic events are transferred far downstream to habitats occupied by resident and anadromous fish. During my time working on the Olympic Peninsula I have witnessed dozens of such events in the Boundary Creek, East Twin River, Deep Creek, Calawah River, Sol Duc River, Hoh River and Clearwater Rivers.

Two state highways (101/112) directly bisect the Lower Elwha Klallam Tribe's usual and accustomed area and cross numerous streams through both bridges and various drainage structures including culverts and fishways (depending upon location). Topographic conditions on the Olympic Peninsula influenced the location where state highways were constructed. River valleys were often used because construction was relatively simple through low

gradient river valleys. For example, Highway 112 is routed along portions of the mainstem Pysht, Clallam and Hoko Rivers where it encroaches on river, floodplain and riparian habitats and crosses tributaries at multiple locations. These crossings have created barriers for fish to access floodplain tributaries and wetlands that provide a critical overwintering habitat for species such as coho salmon (Figure 35 in Haggerty et al. 2006 & Figure 5). In contrast Highway 101 crosses many watersheds in the lower portions of their watershed, particularly on tributaries to the Strait of Juan de Fuca. On larger streams, bridges have been constructed that generally pass fish, but may cause other ecological problems. These may include interference with fluvial transport of wood and sediment and velocity impacts when bridge openings are undersized. On smaller streams culverts have been historically installed that if impassible may dramatically impact fish production of the entire watershed. Some examples I have personally observed include Chicken Coop (Figure 6), Colville (Figure 7) and Joe Creeks (Figure 8).

Despite the level of historic impacts that have contributed to degradation of stream and riparian habitats on the Olympic Peninsula, I have considerable optimism that these watersheds and their habitats may be recovered using a combined strategy of conservation easements and purchases to protect existing functional habitats, improved land use regulations to prevent further damages, active restoration to recover damaged habitats, and reductions in fishing mortality. The systematic correction of barrier culverts is an important place to focus restoration efforts. It is my professional opinion

that the Olympic Peninsula represents one of the best geographic regions in Washington to recover salmon populations. The number of watersheds that have federally protected lands managed by the National Park Service and US Forest Service ensures that habitat forming processes will be protected across a large area. Much of the remaining areas are state and privately owned lands managed for timber production. Although these lands have historically been intensively harvested with little regard for watershed and ecosystem processes, significant improvements have occurred in the last two decades as forest practice regulations in Washington State improved under the Timber, Fish and Wildlife Agreement (TFW) and Forest and Fish Agreements (FFA). TFW (1987) and FFA (2000) were negotiated between the timber companies, state agencies, Tribes and environmental groups. The Lower Elwha Klallam Tribe is actively involved with several large timber companies to accelerate restoration of watersheds and recovery of salmon populations. Improved forest management combined with active restoration of habitats drives the Tribe's restoration of forested watersheds within its usual and accustomed area.

IV. Overview of LEKT Fisheries Program.

The Lower Elwha Klallam Tribe maintains a natural resources department that includes fisheries, water quality, wildlife management, and forestry responsibilities. The fisheries division is by far the largest program within the natural resources department and includes the following divisions: 1) fisheries and shellfish management, 2) hatchery production, 3) habitat management. Each division is supervised by a biologist and staffed with several

technicians, who reports to the natural resource manager. The natural resources manager receives policy guidance from a fisheries committee composed of tribal members with interests in fishing, however ultimate responsibility for tribal policy decisions regarding fisheries issues lies with the Tribe's business council. Members of the business committee are directly elected by registered members of the Tribe.

Fisheries issues are of great importance to the Tribe as a whole. The Tribe and its ~800 members have struggled economically, and fisheries for salmon, marine fishes and shellfish provide incomes to many families. Subsistence fishing is also practiced by many tribal members. The conservation and restoration of salmon in particular are an important focus of the daily work performed in the Elwha fisheries office. Fisheries management actions are conducted with the long term sustainability and recovery of the salmon resource as a whole in mind. Hatchery supplementation actions are carefully evaluated to allow fishing opportunity while minimizing deleterious interactions with native stocks. Habitat management is conducted with an eye toward protecting existing functional habitats while restoring those degraded by human impacts. Each division in the fisheries department works collaboratively to achieve overall recovery goals by watershed and species. The Tribe also interacts with federal, state and private landowners to achieve restoration goals where possible.

The habitat management division uses watershed assessment and monitoring programs as a scientific tool to assess resource conditions and identify

restoration opportunities and priorities (Beechie et al 2002). Our basic philosophy is to conduct watershed restoration systematically and at the watershed scale. In other words we attempt to treat all human caused problems over a wide an area as possible. Working within the hydrographic boundaries of individual watersheds is a rational way to break down restoration issues into discrete boundaries that coincide with physical and biological function. Watershed scale restoration also has the highest potential for succeeding (Wohl et al. 2005[6]). Restoration conducted at the scale of individual projects or at the individual stream reach may not result in the salmon recovery goals favored by the Tribe. This is not to say that the Tribe does not support or pursue individual projects. While whole watershed restoration is the "gold standard", the reality is that actually implementing the practice is exceedingly difficult and time consuming. In some watersheds a more opportunistic approach may be the only possible way for restoring habitat conditions in the short term.

Within an individual watershed we generally follow the recommendations of Roni et al (2002)[7] for

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[6] Wohl, E., P.L. Angermeier, B. Bledsoe, G.M. Kondolf, L. MacDonnell, D.M. Merritt, M.A. Palmer, N.L. Poff, and D. Tarboton. 2005. River restoration. Water Resources Research 41:1-12.

[7] Roni, P., T.J. Beechie, R.E. Bilby, F.E. Leonetti, M.M. Pollock, and G.R. Pess. 2002. A review of restoration techniques and a hierarchical strategy for prioritizing restoration in Pacific Northwest watersheds. North American Journal of Fisheries Management 22:1-20.

conducting hierarchical watershed restoration. Roni et al. 2002 noted that restoration of Pacific Northwest watershed should focus on the restoration of natural processes that create and maintain habitat as opposed to manipulating instream habitats. As such they recommended an approach that includes the following elements:

- Protect areas of high quality and functional habitat
- Reconnect isolated habitat areas isolated by human caused barriers
- Restore hydrologic, geologic and riparian processes
- Conduct instream habitat enhancement
- Conduct meaningful watershed scale monitoring

These principles are being applied to watershed scale restoration efforts by the Tribe in the following watersheds: Elwha River, Salt Creek, East Twin River, Deep Creek, and Pysht River. The tribe also has active watershed restoration in other watersheds such as Siebert Creek, Ennis Creek, Clallam River and Hoko River. These efforts to date have been more opportunistic and have not scaled up to the watershed scale as yet. Opportunistic restoration may include smaller scale projects with individual landowners in watersheds that lack a completed scientific analysis of watershed conditions.

The Tribe not only identifies restoration opportunities, but procures funding through competitive grants. The Tribe has successfully completed over 40 separate restoration projects with

a combined value exceeding $10 million dollars since 1994. The Tribe employs a full time restoration crew composed of tribal members who implement restoration projects under the direction of the habitat manager. The habitat manager position is supported by federal and state funds received in support of the Forest and Fish Agreement (FFA).

V. LEKT Culvert Related Work.

The Lower Elwha Klallam Tribe has become increasingly involved with the inventory, assessment and correction of culverts within its usual and accustomed area. This has occurred because of the increased knowledge gained of our watersheds through scientific study and analysis. Studies such as those funded by and conducted by the Tribe on Salt Creek (McHenry et al. 2004)[8], state forest lands in the Clallam River (WDNR, Unpublished Data) and the Pysht River (Haggerty et al. 2005)[9] directly identified numerous barriers to historic fish habitats in those watersheds caused by culverts at road crossings. For example, the Salt Creek watershed analysis identified 28 culvert barriers that blocked access to one-half of the historically accessible habitat in the watershed (Figures 27 & 28 in McHenry et al. 2004). Individual site specific assessments at numerous locations have

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[8] McHenry, M., R. McCoy and M. Haggerty 2004. Salt Creek Watershed: Assessment of habitat conditions, fish populations and opportunities for restoration. Lower Elwha Klallam Tribe, Port Angeles, WA.

[9] Haggerty, M., M. McHenry and R. McCoy. 2006. Pysht River floodplain habitat Inventory and assessment. Pacific Salmon Commission, Vancouver, British Columbia, Canada.

further reinforced the need to systematically identify and correct these culvert barriers: they are ubiquitous throughout the tribe's usual and accustomed area. These include assessments conducted by other agencies such as WDFW's efforts to identify and prioritize barriers on state highways (www.wsdot.wa.gov/Environment/Biology/FP/fishpassage.htm).

Collectively these inventories provide useful information that partially describes the level of impacts from barrier culverts within the Tribe's usual and accustomed area (by individual landowner). Because many culverts on other ownerships or in other watershed have never been formally identified and surveyed, the Tribe considers the level of impacts described to date as conservative estimates. Comprehensive culvert inventories have not been completed on all county, city and private ownerships within the Tribe's usual and accustomed area.

The degree of impact that barrier culverts cause to anadromous salmon within an individual watershed is highly variable. On Ennis Creek culverts and a poorly maintained fishway on Highway 101 acts to limit access to well over half the historically accessible drainage area. Indeed the major tributary to Ennis Creek, White Creek, is completely inaccessible due to a blocking, perched culvert on Highway 101 (Figure 9 & 10). An unnamed tributary to the Pacific Ocean is completely blocked at its Highway 101 crossing at mile post 155 (Figure 11). In contrast, on Deep Creek, culvert barriers on Highway 112 and small tributaries limit access to only ~10% of historically accessible drainage area. In general I would characterize the total effects of culverts as variable depending upon

watershed, with the greater impacts being to small watersheds and individual small tributaries. However, in combination with other ecological impacts, culvert effects are a significant negative cumulative effect for Olympic Peninsula salmon.

VI. Methods for Culvert Assessments.

There are multiple options for conducting culvert assessments and arguments can be made for or against various methodologies. In general, there are six basic questions that need to be answered when conducting a comprehensive assessment of barrier culverts. These include: 1) the location of the culvert within a given watershed's stream network, 2) the extent of the barrier (complete vs. partial), 3) the amount and quality of potential habitat affected, 4) the ecological effects of the culvert, 5) the physical characteristics and condition of the culvert, and 6) the presence or absence of fish in relation to potential barrier culverts. To locate stream crossings some surveys use existing maps available in Geographic Information Systems (GIS) to locate the intersection of road and stream networks. The tribe has used this approach to initially locate culverts in the Pysht River floodplain (Haggerty et al. 2005). These GIS based approaches to locating stream crossings at road and stream intersection tend to increase cost efficiencies as maps can be produced quickly in the office. Another approach is to simply walk the stream network until a culvert is encountered. This approach works well in watersheds that have extensive, old and poorly mapped road networks such as may be found in state and private industrial forest lands. However, it requires a large investment in field time by crews thus increasing inventory costs. The Tribe has used this

approach to document culvert barriers in the Clallam River drainage (WDNR Unpublished Data).

A novel method involves the use of LIDAR (Light Detection and Ranging) Imaging, a remote sensing technique that can provide precise digital elevation (grid) models of the earth's surface. The Tribe used LIDAR data for Salt Creek and a combination of LIDAR and ground based GPS investigations on the Pysht River to locate, correct and classify stream layers for use in watershed analysis (McHenry et al. 2004; Haggerty et al. 2005). These techniques resulted in highly accurate maps of the stream habitats available in Salt Creek and the Pysht River floodplain (see Figures 3, 27, 28 in McHenry et al. 2004; Figures 7, 10, 24, 36 in Haggerty et al. 2005). This method resulted in a much greater network of stream habitats than existing hydrologic data layers based on traditional topographic surveys (USGS, WDNR). These maps provide the data upon which digital elevation models (DEMs) are generated. Due to hardware restrictions such as capacity and speed, large areas of coverage typically have reduced resolution. For example, generating and using a DEM of a large area such as the state of Washington, a grid width of 30 meters square is used to create the DEM. This grid resolution is derived from the existing topographic quadrangle which is 1:24,000 scale maps generated in the 1940's from aerial survey methods. In contrast, LIDAR generated maps produce grid cells of 2 m square. The level of accuracy afforded by this new technology has greatly improved remote mapping capabilities.

We compared the LIDAR imagery with existing stream and road data layers and ground surveys to

identify habitats affected by fish passage barriers. Indeed, many of the habitats identified in the Pysht floodplain assessment were not known (not found on existing water type maps) until the LIDAR data was developed for the area. On the Pysht River, several stream/wetland complexes did not exist on existing water type or hydrology maps including: Spruce, Shop, Andis, Piling, 4500, and 4800 creeks. Other tributaries including Cabin, Razz and Lost Creek were either in incorrect positions or underestimated the stream length actually found on the ground. Not only were these habitats not well described, they were frequently blocked by culverts on state and privately owned roads. Culverts were estimated to represent barriers to nearly 53% of the total length of floodplain habitat. Additionally, culverts blocked access to a total of 74.9 acres of wetlands habitats in the Pysht floodplain, a critical habitat type for coho salmon (Haggerty et al. 2006). Based on these experiences I have concluded that because of inaccuracies in base hydrology maps it may be difficult to identify the total extent of the impacts caused by culverts. It is my professional opinion that the majority of culvert inventories that have been conducted to date, including those on state highways and forestlands, are conservative in their assessment of total impacts. These surveys are based only on data in existing hydrology layers, which to date has not been comprehensively corrected by LIDAR analysis or other means. Until the known population of streams, wetlands and other types of aquatic habitats are accurately defined, the likelihood of missing streams and blocking culverts remains high.

To assess effects of culverts on fish and associated habitat forming processes the Tribe has primarily used the WDFW assessment methodology (WDFW 2000[10]). This method provides a relatively rapid and repeatable, technique for assessing physical conditions at individual culvert sites. Parameters analyzed include culvert size (and size in relation to channel size), material, condition, slope, outfall drop, shape, and bottom materials. Additional data collected includes the characteristics of fill, and habitat conditions immediately downstream of the culvert. In my experience the level A analysis has resulted in a determination of the culvert's ability to completely pass fish, partially pass fish, or form a complete blockage to fish passage. In cases where the level A fails to produce a clear outcome in terms of fish passibility, a level B method that involves more detailed survey data collection in combination with hydrology modeling can be applied. Using the WDFW assessment methodology provides a standard methodology so that data can be readily shared between tribes and state agencies. We used the Level A method successfully on both the Pysht and Salt assessments to identify total and partial barriers to fish migration. Level A worked very well for these surveys as the majority of culverts encountered were clearly undersized, perched, lacked natural substrate, or set at excessive slopes. Additionally the majority of the culverts encountered were constructed of concrete

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[10] Washington Department of Fish and Wildlife. 2000. Fish passage barrier and surface water diversion screening assessment and prioritization manual. Salmon Screening, Habitat Enhancement, and Restoration (SSHEAR) section, Olympia.

with smooth bottoms. Smooth concrete culverts may produce flow velocities that exceed sustained swimming speeds generated by juvenile fish. An assessment of this type takes approximately 3 hours per culvert by a two-person crew (excluding driving time) once the culvert is identified. The survey can be conducted by natural resource technicians with specific training using the method, but not necessarily requiring an advanced degree. In order to reduce subjectivity, the interpretation of the data collected and the assignment of culvert passibility should be done by either a biologist or hydraulic engineer (or preferably a team having both areas of expertise).

Once a stream barrier culvert has been located and identified, it is important to characterize the amount and quality of habitat blocked by the culvert in question. Habitat characterization is typically used to assign importance or prioritization to culvert corrections within a wider geographic area (watershed, region, state, province). Ideally all culvert corrections would be implemented over a reasonably short time period. However, budget limitations have traditionally limited comprehensive barrier corrections. As a result, habitat characterization is used to prioritize corrections: the culverts that block the greatest amount of high quality habitat areas are typically corrected first.

Similar to methods for locating culverts, there are multiple methods for assessing the amount of habitat and its quality above a given blocking culvert. The most accurate methods involve a direct survey of habitat by field crews. Under this methodology, crews would physically inventory stream characteristics upstream of barriers using any number of inventory

methods. WDFW (2000) uses a system that measures attributes such as stream gradient, width, habitat type, stream bottom substrate and large woody debris. While this method is desirable in terms of producing highly accurate results of habitat conditions, it is also more expensive requiring the deployment of trained crews at considerable cost. Costs can be reduced by implementing habitat sub-sampling schemes or reducing the number of variables collected.

The Tribe has used both ground based surveys and estimates of habitat above barriers based upon physical models driven by watershed geomorphology. The later involves delineating stream network by dominant geomorphic drivers of habitat condition including gradient and valley confinement. This is a particularly good technique where accurate maps of the stream layers are available as derived from LIDAR. We used this technique in Salt Creek (McHenry et al. 2004) to estimate the length of stream, by gradient and confinement class, above a given blocking culvert. This provides a convenient means of prioritizing restoration treatments and corrections, particularly when budgets limit field survey time.

VII. Barrier Correction Successes.

The rapid responses of salmon when barriers of various types are eliminated are well documented in the fisheries literature. Probably the most spectacular example is from the Fraser River, British Columbia, where Pink and other salmon species were cut off from the majority of the watershed by a landslide in 1913. Following installation of fish passage facilities in 1940, pink salmon quickly re-colonized the upper

watershed and established a large self-sustaining population within 20-30 years (Pess et al. 2007[11]). In recently de-glaciated habitats in Glacier National Park, Alaska, diverse populations of salmonids have established themselves within decades of glacial retreat (Milner and Bailey 1989[12]). In contrast where fish ladders have been installed or culvert barriers removed the response may be much more rapid. On the Cedar River, Washington, installation of a fish ladder on a low head dam allowed naturally migrating fish habitats from *[sic]* they had been excluded for over 100 years. Within 3 years the total density of juvenile salmon tripled in study reaches above the fish ladder as coho and other species colonized historic habitats (Kiffney et al. 2008[13]). Pess et al. (2003) found that culvert barrier removal projects on the Stillaguamish River, Washington opened 19 km of stream habitat for coho, chum, steelhead and cutthroat trout. Over 250 adult coho were observed spawning in the habitats above the former barrier culverts during two

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[11] Pess, G.R., T. Quinn, and K. Kloehn. 2007. The influence of population dynamics and landscape condition on Pacific salmon re-colonization. Proceedings from the International Association of Landscape Ecology World Congress, July 8-12, 2007.

[12] Milner, A.M., and R.G. Bailey. 1989. Salmonid colonization of new streams in Glacier Bay National Park, Alaska. Aquaculture and Fisheries Management 20:179-192.

[13] Kiffney, P.K., G.R. Pess, J.H. Anderson, P. Faulds, K. Burton, and S.C. Riley. 2008. Changes in fish communities following recolonization of the Cedar River, Washington by Pacific salmon after 103 years of local extirpation. River Research and Application.

consecutive spawning seasons after the project (Pess et al. 2003[14]).

Within the Lower Elwha Klallam Tribe's usual and accustomed area, barrier corrections have also resulted in rapid responses by colonizing populations. In Salt Creek, the Tribe in a cooperative project with the Department of Natural Resources (WDNR) removed a series of culvert barriers on an unnamed tributary (19.0010) during the summer of 2006. During the first rains that fall (October) adult coho salmon were observed passing through former barriers and spawning was documented above several of the barriers. I have made similar observations following barrier removal projects on Siebert Creek, where a box culvert and fish way were replaced by a bridge (Old Olympic Highway Crossing) and Susie Creek, a Lyre River tributary, where a culvert was replaced by a bridge (Highway 112 bridge replacement). Monitoring of adult escapement on both systems has indicated a positive increase for steelhead and coho salmon (Unpublished Data, Lower Elwha Klallam Tribe). On a South Fork Pysht River tributary (unnamed), the Tribe improved access to a forested wetland and pond complex above an impassible culvert barrier. Smolt production

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[14] Pess, G. R., T. J. Beechie, J. E. Williams, D. R. Whitall, J. I. Lange, J. R. Klochak. 2003. Chapter 8 - Watershed assessment techniques and the success of aquatic restoration activities. Pages 185-201 in Wissmar, R. C., P. A. Bisson. (Eds.) Strategies for Restoring River Ecosystems: Sources of Variability and Uncertainty in Natural and Managed Systems. American Fisheries Society, Bethesda, Maryland.

monitoring has shown a steady and dramatic increase in the number of coho salmon being produced from this system following restoration (Figure 12; Unpublished Data, Lower Elwha Klallam Tribe).

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Figure 12. Coho smolts produced by year from the E3000 pond complex following correction of culvert barriers by the Lower Elwha Klallam tribe in 2003. Source: Unpublished Data Lower Elwha Klallam Tribe

FISH PASSAGE PROGRAM
DEPARTMENT OF TRANSPORTATION INVENTORY
FINAL REPORT

Prepared for

THE WASHINGTON STATE LEGISLATURE
JUNE 1997

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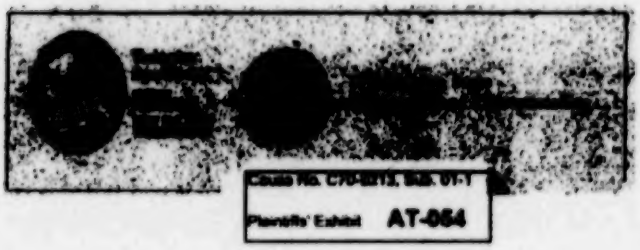
WASHINGTON DEPARTMENT OF FISH & WILDLIFE
LANDS AND RESTORATION SERVICES PROGRAM

Salmonid Screening, Habitat Enhancement
and Restoration (SSHEAR) Division



[Original Page 1]

EXECUTIVE SUMMARY

It is recognized that wild salmon and trout are a symbol of the waterways of Washington, providing economic benefit to its citizens and indicating the health of streams and rivers. Economic advantages to local communities from salmonids are not abstract considering the dollars that change hands as a result of human interest in recreational and commercial fishing. In addition, vigorous populations of salmonids are important for healthy, functioning ecosystems because of the interdependence of vast numbers of flora and fauna. Many occupants of the aquatic and terrestrial ecosystems depend on salmonids for food. Most emphatically, endangered species including salmonids present imposing arguments to maintain and manage wild species on an integrated basis.

Fish passage at human made barriers such as road culverts is one of the most recurrent and correctable obstacles to healthy salmonid stocks in Washington. In some cases, many miles of quality salmonid spawning and rearing area have been blocked by a barrier culvert. State Laws subsequently recognize the importance of fish passage (Appendix I). These include RCW 75.20.060, titled "Fishways required at dams, obstructions-penalties, remedies for failure"; RCW 77.16.210, "Fishways to be provided and maintained"; RCW 75.20.061 titled "Director may modify inadequate fishways and fish guards"; and RCW 77.12.425, titled "Director may modify inadequate fishways and protective devices." Hence, fish passage at state highway culverts is important and timely and has been addressed by

Washington Department of fish and Wildlife (WDFW), Washington Department of Transportation (WSDOT), and the Washington State Legislature during the bienniums 1991-93, 1993-95, and 1995-97.

Comprehensive management of stream crossings at state highways requires fish passage inventory and barrier correction and is the topic of this report. Inventory of state owned culverts provides appropriate priorities using gains in usable habitat, sets protocol for repair, and provides a basis for budgeting. Long term planning is the cornerstone to successful funding, biological evaluation, design, project construction, and evaluation of results.

The WSDOT/WDFW strategy for inventory and correction of fish passage barriers is as follows:

- Reporting and documentation of state highway road culvert fish passage problems (inventory).
- Verification of significant stream reaches up to and above barrier culverts, quantification and qualification of blocked habitat, and prioritization of barriers for correction based on benefit evaluation (called priority indexing).
- Engineering evaluation and conceptual design.
- Final design and construction of fish passage facilities on high priority barriers (highest priority index) with dedicated barrier correction funding.
- Identification and correction of fish migration barriers concurrent with WSDOT safety and mobility road projects.
- Fish use evaluation.

[Original Page 2]

The WSDOT inventory has been an evolving project confounded by the merger of the former Fisheries and Wildlife departments; numerous adjustments to inventorying, physical surveying, and prioritizing methodologies; and the conversion to new and more effective database software. When the effort began with the former Department of Fisheries only salmon streams were the target of inventory efforts. Since the merger on July 1, 1994, the issue of fish passage has broadened to include anadromous and resident trout. Through investigation and expertise of habitat biologists it has been determined to be of extreme value to allow trout populations the mobility to intermix to maintain heterozygosity. It is equally important to enable trout to access smaller tributary streams and headwater habitats where adult spawning and juvenile rearing occur. In addition, it has been documented trout occupy stream gradients much steeper than those thought to be occupied by salmon. Hence, acceptable stream gradients were increased from 7% to 12%. Many stream sections containing barrier culverts in resident trout waters were subsequently added to the inventory, although most of the sections inventoried early in the process were not redone.

To date, WDFW has completed all of the road culvert segment and has inspected a total of 1,585 fish bearing stream crossings (culverts) on state routes throughout all six WSDOT Districts (see Figure 1). WDFW has identified 509 barrier culverts for further evaluation. Of those, 268 barrier culverts required correction to provide significant fish habitat gains. Sub-sampling resurveys to document omissions and

errors estimated that another 95 barriers would require correction if the most current methodology were applied to the entire state complex.

Surveys, habitat assessments, and downstream verification of fish passage up to identified barriers have been completed on 193 streams. Sixteen of the streams surveyed did not provide a significant amount of habitat gain above the barrier culvert to justify barrier resolution. Another 91 steams were found to have a significant reach of habitat (>200 m downstream and upstream of the barrier), through a threshold determination (TD) habitat assessment, to justify barrier resolution. A total potential spawning and rearing area of 1,619,839 m^2 (249 linear miles) is currently blocked by WSDOT culverts on the 177 surveyed streams requiring barrier resolution; this is enough wetted stream area to produce 200,000 adult salmonid annually. These estimates would all increase when considering the additional 186 barriers that did not have full habitat assessments.

Working together, WDFW and WSDOT have resolved 17 barrier culverts since 1991 using WSDOT dedicated funding, and another 23 resolved through safety and mobility projects. Total habitat gained for the dedicated projects alone was 216,000 m^2, or roughly enough stream area to produce 27,000 salmon annually, not including the numerous other salmonids that have benefited from these gains. Planning is underway for resolution of at least seven more barriers during the 1997-99 biennium using dedicated funds, and to resolve all barriers in the next two to three decades. Meeting this objective will require the majority of projects to be evaluated concurrent with safety and mobility road projects and

the remainder corrected as independent fish passage projects. Estimated cost is about $40 million, with resultant benefits exceeding $160 million.

[Original Page 3]

BACKGROUND

Alarming declines in salmonids in Washington during the 1980's and 1990's have caused extreme concern among fish managers, commercial and sport fishing interests, environmentalists, Native Americans, and legislatures. Overfishing, hydropower development, habitat degradation, and oceanic events such as El Niño are most often referred to as the causes. One habitat-related cause for weakening of salmonid production which can be easily resolved is human-made barriers to fish migrations caused by improper placement of road culverts. Increasing numbers of roads and resulting culverts are a common product of a growing human population in Washington. Culverts often pose immediate or eventual migration barriers to fish due to design which does not allow passage, or design that fails to consider the hydrology of watersheds, resulting in a culvert placement that eventually becomes a barrier. Changes in hydrology of streams can be natural or can result from watershed-related activities such as logging, road construction, paving, or fires. These factors can cause a passable culvert to become a barrier once stream bed scour from changes in hydrology occurs below the culvert.

A common misconception is that only adult salmon are affected by culvert barriers, as they return from the ocean to native rivers and streams to spawn. Life history studies on salmonids reveal culverts can also limit adult resident trout production and juvenile

salmonid production by blocking them from important rearing areas such as swamps, ponds, marshes, or small streams. These areas have great significance to salmonid production. Research documents the upstream movement of young salmonids into areas such as this, especially during the colder months. Young salmonids do not have the swimming power of adults and are easily blocked from these areas by improperly installed culverts. Another misconception is that streams which dry in the summer have no value to salmonids; this is also not the case. Chum, pink, and sockeye salmon use these areas for spawning, and juvenile coho and chinook salmon for rearing during the high flow months.

This report documents agreements and subsequent efforts to inventory and correct fish passage problems at Washington State highway culverts. It examines Washington Department of Transportation and Washington Department of fish and Wildlife activities pursuant of inventory and correction of fish passage barriers for the bienniums 1991-93, 1993-95, and 1995-97 and provides a prioritized list for future work. It is an update to the Fish Passage Program Progress Performance Reports for the bienniums 1991-93, and 1993-95 (Burns - et. al., 1992, Bates - et. al. 1995). Many methodologies for this inventory were developed in previous bienniums, discussed in the last reports, and will be referred to in this document. In some cases revisions to the original methodology occurred this biennium and are discussed herein.

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length of usable stream above the culvert, surveys divide the stream into habitat types: pools, riffles,

rapids and ponds. This is done by sampling 30-meter sections every 161 meters (one-tenth mile) or a 60-meter sample every 322 meters in streams estimated to be greater than one mile in length. Within sample areas, habitat types (riffle, pool, rapid and pond) are delineated and measured. streambed substrate composition (percentage of boulder, rubble, gravel and sand) within each type is estimated, and the stream gradient is measured. The samples result in an estimated ratio of habitat types which is then applied to the total stream length to obtain total riffle, pool, rapid and pond areas. These areas are then used to calculate spawning and rearing areas (see below). Any artificial barriers to salmonid passage are also documented. Appendix VIII contains a detailed description of the current physical habitat survey methodology.

For survey methods (1, 2, and 3) used between January 1992 and July 1995, a stream gradient > 7% continuing for 160 m or more was considered to be a gradient barrier. After July 1995 (method 4), this was increased to a gradient > 12% which continues for more 160 m. Since the end point of a physical survey may be controlled by a gradient barrier, then sampling to a higher gradient will result in more habitat being measured.

Physical habitat survey data are used to estimate habitat gains in terms of fish production potential. Habitat gain is expressed in square meters (m^2) of either spawning or rearing habitat. These values are key variables in the PI. Spawning area is used for those species (chum, pink, and sockeye salmon) whose production is limited by spawning habitat. Rearing area is used for those species (coho and chinook

salmon, steelhead, cutthroat, rainbow, bull, brook, and brown trout) whose production is limited by rearing habitat. Physical survey data were processed in a customized spreadsheet which generated a detailed summary report (Appendix X). The report documents the total habitat gain per species, habitat measurements for each reach and the total survey, information describing the quality of the stream habitat, and basic information on the survey.

In the original survey format (method 1), spawning area was defined as total riffle area. However, since spawning occurs mainly in late fall/early winter, when flows are at or near Ordinary High Water (OHW), and habitat types other than riffles may be used for spawning, so this method can result in an underestimation of spawning area. The revised physical survey methods (2, 3, and 4) define spawning area as the sum of the areas of each habitat type at OHW, multiplied by the habitat type's gravel percentage. The OHW line is defined as the point where "the presence and action of waters are so common and usual and so long continued in ordinary years, as to mark upon the soil or vegetation a character distinct from that of the abutting upland" (WAC 220-110-020, 1994). Widths at OHW are determined during the survey using the bank vegetation line, and other hydrologic evidence.

Since some salmonids remain in smaller tributaries year-round, their production is limited by the amount of rearing habitat available during the lowest stream flows of the year. Physical surveys are conducted throughout the year so measurements may not reflect low flow conditions. Calculating rearing habitat based on measured wetted area (methods 1 and 2) may

overestimate available rearing habitat. Methods three and four incorporate the 60 day low flow methodology for calculating rearing habitat. Sixty-day low flow is defined as the lowest average flow occurring over any period of 60 consecutive days during the year, and is calculated for each stream using a regional constant formulated

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WSDOT ROAD PROJECTS AND BARRIER REMOVAL PLANNING

During the 1993-95 biennium, it was recognized that long-term planning between WSDOT and WDFW should include not only funding for dedicated, independent fish passage projects, but also

- close communication and coordination between the two agencies
- identification and correction of barriers in conjunction with road work, and
- long-term commitment by the legislature

Since the WSDOT inventory began, WDFW has developed a system to document highway barrier culverts statewide in order to recommend a prioritized list of fish passage projects to be completed using dedicated funding. However, with ongoing WSDOT road construction projects, it was recognized a more efficient use of state funding would be to repair fish passage problems in conjunction with WSDOT mobility, preservation/ improvement, flood control projects, as well as other jobs WSDOT might undertake which would lead to mobilization of heavy equipment in the vicinity of fish barriers. Given the number of barriers identified by the Phase I

inventory, it was estimated it would take over 100 years to reach complete barrier resolution using dedicated funding only. The repair of culverts in conjunction with road projects, however, could allow complete barrier resolution in two to three decades. This approach would lead to a decrease in project costs by reducing the expense of mobilizing equipment, and a more timely increase in fish production and harvest opportunity which would enhance project benefits.

WSDOT has agreed to notify WDFW about upcoming road construction projects. If this notification occurs before the construction plans are engineered, a field crew will re-inventory all stream crossings located within the highway miles of the road project. Since WDFW and WSDOT have agreed on this approach, the inventory team has received numerous calls from WSDOT requesting comments on fish passage needs at road projects. WDFW has evaluated road projects on the following state routes; 4, 14, 18, 20, 97, 101,142, 164, 401, 504, 522, 530, 542, and 706.

All stream crossings are documented and every WSDOT culvert is evaluated for fish passage before a road project is engineered. A threshold determination (TD) is conducted upstream and downstream of each barrier culvert. Threshold determinations are conducted to verify a significant reach ($\geq$ 200 m) of fish habitat available upstream and downstream of the barrier culvert, in order to meet the threshold criteria for barrier resolution. The TD evaluation requires a surveyor to walk (measuring the distance with a metric belt chain) a minimum of 200 m upstream and downstream of the culvert and document habitat quality. The stream gradient is measured every 50 m, species observations are made, human-made and

natural barriers are documented, and habitat quality is noted. A WDFW TD form (Appendix XII) is used when collecting this data.

If a barrier culvert within the road project meets the threshold criteria (has a significant : ach of habitat upstream and downstream), then it will be recommended for barrier correction, or culvert replacement, to be completed during the road project. Sometimes an undersized or failing culvert may be recommended for replacement for easier maintenance. Table III lists the barrier culverts that were or are planned to be replaced or corrected through road project recommendations. Barrier culverts WDFW

BRIEFING DOCUMENT
FISH PASSAGE
A KEY TO FISH HEALTH
4/8/97

WHY HAVE FISH PASSAGE?

1. Limited fish access to stream, lake, and river habitats because of poor road culvert construction, filling, diking, irrigation systems, and dams causes significant impacts to fish populations. Fish need habitat but if they cannot reach spawning and rearing areas, then the full potential of the habitat is not achieved and depressed and even healthy fish stocks decline to levels that cannot support utilization objectives and even to levels of extinction.

2. State law requires fish passage. At least as early as 1881, fish passage was recognized as a need in Washington and expressed in the Code of Washington. The most recent legal requirements are embodied in RCW 75.20.060 and 77.16.210.

3. Road crossings are a particularly insidious deterrent to fish passage because the average observer views water running through a culvert as an effective passage medium. In fact, road crossings block about 3,000 miles of spawning and rearing areas in Washington. This results from about 25% of the road culverts that are in noncompliance with fish passage statutes. Even when these culverts are provided with fish passage structures, there is about 25% noncompliance for maintenance needed to ensure effective passage. For facilities other than road culverts, the picture is not as clear, but based on

eastern Washington estimates noncompliance is expected to exceed 10%.

4. It is difficult to find categories of facility owners that do not share some responsibility for fish passage problems. For example, roughly about 10% of barrier culverts involve state roads, 40% county/municipal roads, and the remainder federal and private roads.

HOW HAS FISH PASSAGE BEEN ADDRESSED?

1. In the 1980's, WDFW created a fish passage unit that

a) maintains databases on fishways and barriers,

b) inventories road culvert barriers and associated habitat,

c) regularly inspects fishways and sends maintenance notices to owners,

d) serves as a core of technical fish passage experts,

e) conducts workshops, and

f) conducts specialized, high-risk construction projects to fix barriers using mobile, interdisciplinary teams of biologists, construction personnel, and environmental engineers. This complements the efforts of volunteers and Regional Enhancement Groups that concentrate on lower risk projects.

2. In the 1990's, WDFW emphasized partnerships with jurisdictions to promote fish passage in a cost-efficient manner.

a) WDFW and the Washington State Department of Transportation (DOT) entered three interagency agreements in the 1990's that involve barrier inventory work and barrier correction on state roads using dedicated fish passage funds. WDFW constructs many of the projects pursuant to reimbursable contracts. To accelerate the process, DOT also accommodates fish passage concurrent with safety and mobility road work using road funds. This approach became apparent when it was estimated that it would take more than 100 years to correct all barriers at state highway culverts with independent fish passage projects alone. Alternatively, a carefully designed blend of this effort with fish passage work on mobility and safety road projects could significantly reduce this time span. This improves cost efficiency because mobilization and some work efforts at the culvert sites would not have to be duplicated and because benefits of restored fish production would not be delayed nearly as long. In fact, it has been estimated that every dollar spent on fish passage work will return a minimum of four dollars in fish

benefits, even when not considering non-consumptive values. It is expected that the prioritization of all state road barriers will be completed by the end of the 1995-7 biennium and that barriers on DOT roads can be corrected within two to three decades.

b) There is a recent global MOU with the Washington State associations of Counties and Cities and other state agencies that sets the framework for cooperative arrangements between WDFW and individual counties and cities.

c) The WDFW/DOT approach has been extended to a limited number of individual counties and, to a lesser extent, cities. In exchange for WDFW conducting the inventory of barrier culverts on county roads, the county is expected to provide at least half the funds for cooperative barrier resolution projects that WDFW builds. These arrangements are not intended to be open-ended, but rather as a "jump-start" to allow cities and counties opportunity to learn how to address fish passage and to budget for future barrier correction. The intent is for these authorities to independently correct barriers after working with WDFW on several projects. This program is in varying stages of completion with Kitsap, Skagit, and Thurston counties. Jefferson County has

agreed to this arrangement beginning the 1997-9 biennium, although funding is not yet secured for even the inventory phase. Snohomish, King, Clallam, and Pierce counties and the cities of Olympia and Tumwater have also made sincere efforts at addressing fish passage.

WHAT'S IN THE FUTURE?

1. There is a need to accelerate fish passage on county and city roads, which are estimated to include about 1000 barriers. If the WDFW/DOT model is followed, it is estimated that road culvert inventories and habitat assessments to prioritize barriers for order of correction will cost about $8 million spread over two to three decades. If barrier correction incorporates a blend of dedicated fish passage projects (e.g., 200) and projects in conjunction with road work (e.g., 800), then correction of all barriers would cost about $100 million, again spread over two to three decades. This time period coincides with that for correction of barriers on DOT roads and includes cost efficiencies derived from interagency cooperation and integration of fish passage with road work.

2. There is a need to promote fish passage through the direct, personal involvement of people that work and live within watersheds. This is particularly important for barriers on private lands which are not addressed in the aforementioned jurisdictional approach and that are typically of lower risk than jurisdictional road crossings. WDFW enlists volunteers and coordinates the efforts of Regional Enhancement Groups in

programs that involve hands-on salmonid restoration efforts. For fish passage efforts, this involves Volunteer Technical Specialists and environmental engineers in WDFW well versed on fish barrier inventory, prioritization and correction. These specialists can, in turn, train and develop this effort within the volunteers and Regional Enhancement Groups. This approach is designed to accelerate fish passage efforts through a network of local partnerships and a well-informed, active constituency operating on a watershed approach that interfaces well with the jurisdictional approach.

Table 1a. 315 Base Culverts with partial, total, and unknown barriers downstream.

	Zero Downstream Barriers	*One Downstream Barrier*	*Two Downstream Barriers*	*More than Two Downstream Barriers*	*Total*
Base Culverts	178	86	29	22	315
Percentage of Base Culverts	56.51%	27.30%	9.21%	6.98%	100.00%
Downstream Barriers Associated with Base Culverts	0	86	58	94	238
Percentage of Downstream Culverts	0.00%	36.13%	24.37%	39.50%	100.00%

Table 1a classifies the 315 state owned culverted barrier sites that Brian Benson has identified in rebuttal to Tyson Waldo by their number of associated downstream barriers. Four classes are used: zero downstream barriers, one downstream barrier, two downstream barriers, and more than two downstream barriers. The purpose is to show that the 315 state owned culverted barrier sites are impacted by downstream culverts to varying degrees. Of the 220 downstream barriers, 14 are downstream of more than one state owned culvert, and as a result there are 238 instances where the 220 downstream barriers are impacting the 315 state owned culverted barrier sites.

Cause No. C70-9213, Sub. 01-1

Plaintiffs' Exhibit **AT-285**

Table 2a. 315 Base Culverts with partial, total, and unknown barriers upstream.

	Zero Upstream Barrier	*One Upstream Barrier*	*Two Upstream Barriers*	*More than Two Upstream Barriers*	*All Upstream Barriers*
Base Culverts	120	63	31	101	315
Percentage of Base Culverts	38.10%	20.00%	9.84%	32.06%	100.00%
Upstream Barriers Associated with Base Culverts	0	63	62	1245	1370
Percentage of Upstream Barriers	0.00%	4.60%	4.53%	90.88%	100.00%

Cause No. C70-9213, Sub. 01-1

Plaintiffs' Exhibit **AT-288**

JOINT STATEMENT

REGARDING THE BIOLOGY, STATUS, MANAGEMENT, AND HARVEST OF THE SALMON AND STEELHEAD RESOURCES

OF THE PUGET SOUND AND OLYMPIC PENINSULAR DRAINAGE AREAS OF WESTERN WASHINGTON

Prepared for Use In

UNITED STATES, et al vs. STATE OF WASHINGTON, et al

CIVIL NO. 9213

UNITED STATES DISTRICT COURT WESTERN DISTRICT OF WASHINGTON

Prepared by

Washington Department of Fisheries

U. S. Fish and Wildlife Service

Washington Department of Game

May 14, 1973

JOINT STATEMENT

This Joint Statement has been prepared by and under the direct supervision of, and has been reviewed by, each of the undersigned. Except as may otherwise be stated in said Statement the facts, opinions and conclusions set forth herein are those to which each of us would testify as an expert witness in the case for which the Joint Statement has been prepared.

s/J E Lasater
J. E. Lasater, Assistant Director
Washington Department of Fisheries

s/James L Heckman
James L. Heckman, Manager
Northwest Fisheries Program
Bureau of Sport Fisheries & Wildlife
Fish and Wildlife Service

s/Cliff Millenbach
Clifford J. Millenbach
Chief, Fisheries Management
Washington Department of Game

May 14, 1973
Date

PREFACE

This report has been prepared for the purpose of presenting certain basic fisheries information for use in *U. S. v. Washington*, Civil No. 9213, U. S. District Court, Western District of Washington. That action is concerned with the treaty-secured fishing rights of certain Indians. The case is limited to the consideration of those rights as they apply in off-reservation waters of Western Washington exclusive of the Columbia River drainage area and in adjacent offshore waters. The case is concerned primarily with the rights of the Tribes which are parties to that case as they apply to the taking of salmon and steelhead at those Tribes' usual and accustomed fishing places within the aforementioned area (see map p. ii).

Accordingly, this report is limited to a discussion of the salmon and steelhead resources within the U. S. portion of the Puget Sound watershed, the watersheds of the Olympic Peninsula north of the Grays Harbor watershed and the offshore water adjacent to those areas (including those fish which are within any of such waters but are native to outside areas). As used in this report (except where the context clearly indicates otherwise) the term "Puget Sound" includes the Strait of Juan de Fuca and all saltwater areas inland therefrom, and all terms and discussions which would otherwise have a broader or more general scope - such as "fishery resource," "anadromous fish," "salmonids," "total catch," "hatcheries," "freshwater areas," etc. - are to be construed as being limited to the aforementioned geographical area and species to which this report is confined. Other terms commonly

used in reference to Pacific salmon and steelhead are defined in the glossary.

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Glossary of Terms

1. Anadromous fish - Species that are hatched in freshwater, mature in saltwater, and return to freshwater to spawn.
2. Brood year - The year during which a particular year class of fish was spawned.
3. Commercial fisheries - Those fisheries engaged in for the purpose of selling the product.
4. Competitive fisheries - Fishing operations where two or more specific gear types (e.g., sport and commercial) or two or more distinct categories of fishermen compete in the harvest of the same stock of fish or shellfish or compete physically on the same fishing grounds. Fishing by one or more types of gear which interferes with the success of the other(s).
5. Cycle - The life span of a fish from its incubation through its act of spawning.

[6]. Environment - The total of all external factors that affect fish. Not to be confused with *habitat*, which refers to the place where a fish is found.

7. Escapement - See spawning escapement
8. Fishery - The resource, its location, and the act of harvesting.
9. Food fish - Those species of fish designated by the Washington Legislature which may be taken from public waters for commercial sale.
10. Game fish - Those species of fish designated by the Washington Legislature which may be taken from public waters solely for personal use or recreational purposes.

11. Gear efficiency - Comparative capability of various types of fishing gear to harvest a specific stock of fish.

12. Habitat - Area which supplies oxygen, food, shelter, and space necessary for a fish's existence.

13. Harvest - The taking and possession of fish by man. Also used to designate the quantity so taken.

14. Harvestable supply - The number of fish which can be harvested from a definable population without impairing the long-run supply.

15. Indian fisheries - Those fisheries that are engaged in by Indians under claim of right arising from their status as Indians.

16. Jacks - Precocious salmon or steelhead, predominantly males, which have matured one or more years prior to the norm.

17. Landings - The quantity of fish harvested at a particular place at a particular time. When used without qualification it refers to commercial landings.

18. Limited entry - A means of controlling the level of fisherman participation in a definable fishery.

19. Management - Application of programs to maintain, enhance, and harvest fish stocks.

20. Marine - Saltwater areas, i.e., oceans or sounds - not freshwater.

21. Mature stocks - Fish of spawning age.

22. Migration - The seasonal mass movement (often annual) of fish from one place to another,

such as from freshwater to saltwater, or upstream to spawn.

23. Milling - Delay or random movement of fish, most commonly exhibited in estuary areas prior to migrating into streams to spawn.

24. Out-migrants - Young of a specific brood year moving seaward (from freshwater or estuaries) to take up marine water residence.

25. Overharvest (overfishing) - Taking of such quantities from a definable population of fish so that it is no longer capable of reproducing at its optimum rate.

26. Race - An identifiable group of fish of a given species, with unique life history or behavioral characteristics which include time of river entry as adults or distinct time and place of spawning.

27. Recruitment - Addition of new fish to fishable population by growth from among smaller size categories.

28. Run - Most often referred to as the total number of fish in a population enroute to its stream of origin.

29. Salmon and steelhead age classes -

Fry - Newly hatched fish up to a month of age

Fingerlings - Fry remaining in freshwater up to the age of one year from the time they are spawned

Yearlings - Fingerlings entering their second year of freshwater residence up to the start of their seaward migration

Smolts - Fingerlings or yearlings on their seaward migration

30. Salmon preserve - Areas in Washington principally closed to commercial salmon fishing. Personal use hook and line fishing is allowed.

31. Salmon species - (Note: Some earlier statutory definitions included steelhead within this term. Taxonomically, it is a member of the trout family.)

Chinook - Also called spring, king, tyee, or blackmouth (Oncorhynchus tshawytscha)

Coho - Also called silver, silverside, or hooknose (Oncorhynchus kisutch)

Pink - Also called humpback or humpy (Oncorhynchus gorbuscha)

Chum - Also called dog or keta (Oncorhynchus keta)

Sockeye - Also called red or blueback (Oncorhynchus nerka)

32. Seed stock - The spawning adult fish which will produce the next generation or cycle. Usually refers to a specific number of adults needed to produce the maximum number of progeny and returning adults several years later.

33. Spawning escapement - Number of anadromous fish that return from the ocean to freshwater streams and spawn.

34. Sport fisheries - Fisheries which are managed or engaged in for recreational purposes or

personal use, the catch of which cannot lawfully be sold.

35. Steelhead - Salmo gairdnerii, anadromous rainbow trout.

36. Stocks - All or part of a fish population distinguished by place of origin, which may vary from a river tributary to a larger geographic area (river, state, country, hemisphere, etc.).

37. Surplus - The number of fish from a definable population escaping the fisheries and that are in excess of reproductive needs.

38. Underharvest (underfishing) - Harvesting fish below the level that would sustain reproduction of a fish population at its optimum rate.

I. THE FISHERY RESOURCE

§ 1 The Fishery Resource

§ 1.1 General Life History of Washington Salmon and Steelhead

1.1.0 Life History Characteristics Common to Salmon and Steelhead

In the fish family Salmonidae two genera, Salmo and Oncorhynchus, include species of particular importance to the Pacific Northwest. Among the various species of the genus Salmo the rainbow trout (Salmo gairdnerii) has an anadromous variety called steelhead. The genus Oncorhynchus includes all of the species of salmon. Those native to North America are:

1. Oncorhynchus tschawytscha - chinook, also called spring, king, tyee, or blackmouth salmon
2. Oncorhynchus kisutch - coho, also called silver salmon
3. Oncorhynchus gorbuscha - pink, also called humpback salmon
4. Oncorhynchus keta - chum, also called dog salmon
5. Oncorhynchus nerka - sockeye, also called red or blueback salmon

These five salmon species and steelhead are native to Washington State waters. Salmon and steelhead are anadromous fish; that is, they spend most of their lives in saltwater but, when approaching maturity, return to freshwater to spawn (Table 1). They generally return to spawn in the stream in

which they were reared naturally or released after being reared in an artificial environment. On reaching the freshwater spawning area, the female excavates a nest or "redd." She then lays a portion of her eggs which are fertilized by the accompanying male. The female then moves slightly upstream and begins excavating another depression. This gravel movement causes the first eggs deposited to be covered. The process is continued until all eggs are deposited and covered. It is important to note that the redd is dug in the stream (riffle area) where there is good inter-gravel movement of water to supply the eggs with oxygen and to carry away waste material during the incubation period. Once the spawning act is completed, all species of salmon die. This is in contrast to steelhead, which may survive the rigors of spawning.

Salmon and steelhead eggs develop and hatch while within the redd. When first hatched they are known as yolk-fry and remain in the gravel until the yolk material is totally absorbed. Egg incubation, hatching, and larval development require from 90 to 150 days, depending on water temperatures. Free-swimming fry emerge from the gravel in early spring. Juvenile salmon and steelhead spend various lengths of time in freshwater (see following sections on general life histories), then migrate downstream to saltwater. In the marine environment they feed heavily, exhibiting rapid growth until they return to freshwater on their spawning migration. Feeding activity of salmon generally ceases or diminishes as they near or enter their natal stream during the spawning migration. In contrast, steelhead do not cease their feeding activity. Degree of maturity at

commencement of spawning migration varies among and within species, some having viable gonads on entry into freshwater, others after several months of freshwater residence (Tables 1-17 for general life histories and timing of freshwater life phases).

1.1.1 General Life History of Chinook Salmon

There are three important races of chinook salmon, Oncorhynchus tschawytscha, native to Washington State. These are the spring, summer, and fall chinook. This nomenclature is based upon their time of re-entry into freshwater. There are some distinct differences in the life history of these races, including the length of time the adults spend in freshwater during their spawning migration, the time of year when spawning occurs, the area in which spawning occurs, and the length of time juveniles spend in freshwater (Table 1).

Spring chinook tend to have the longest freshwater residency, both as adults and juveniles. As the name implies, they enter freshwater in the spring and yet do not spawn until August or September. They tend to migrate a longer distance in freshwater than the fall fish and utilize the spawning areas farthest upstream. Spring chinook juveniles tend to leave the freshwater habitat and migrate into the marine environment during their second year of freshwater residency as opposed to the fall chinook juvenile outmigration which occurs during the first year of freshwater residency.

Chinook salmon spawn principally in the mainstream areas of rivers and their larger tributaries. Spring chinook adults spend from 3 to 6 months in freshwater and spawn during late summer

or early fall. The mature fall chinook adults spend up to 30 to 60 days in freshwater and spawn in the fall and early winter months. The adult freshwater residence of the summer chinook varies between these two extremes.

The juveniles of these races spend from 2 months to 1 year in freshwater before beginning their seaward migration, the spring chinook delaying the greatest length of time. The seaward migration during spring and early summer takes from 30 to 120 days.

Little is known about the life history of the summer chinook other than they enter freshwater during the summer months as adults and spawn in areas somewhat separate from spring and fall chinook.

Individuals of this species spend from 1 to 5 years in saltwater, with the average being 3 years. The maturing adults most commonly return to spawn during their fourth year. The annual average weight of chinook in the Puget Sound net fishery varies between 18 and 25 pounds.

1.1.2 General Life History of Coho Salmon

Coho salmon, Oncorhynchus kisutch, spawn in numerous small coastal streams and in the smaller tributaries of the larger rivers. The mature adults enter freshwater principally during September-November spend 30 to 60 days in freshwater, and spawn in the late fall and early winter. Juvenile coho salmon quite consistently spend a year in freshwater and will begin seaward migration during their second spring and summer of life. The seaward migration takes 30 to 120 days during the spring and summer

months. The juveniles usually spend two summers and one winter in the marine environment, feeding and maturing to return as adults to spawn during their third year of life (Table 1). The annual average weight of coho in the Puget Sound net fishery varies between 8 and 10 pounds.

1.1.3 General Life History of Pink Salmon

Pink salmon, Oncorhynchus gorbuscha, have a rigid 2-year life cycle. Washington streams have populations of spawning adults in odd years only. The mature adults enter freshwater principally during August and September, spend 30 to 60 days in freshwater, and spawn during the early fall. Spawning occurs generally in the lower portion of the drainages and, in some instances, takes place in stream mouth areas where varying degrees of salinity are experienced. The fry begin their downstream migration immediately upon emergence from the gravel and may spend from 3 to 4 months in marine shoreline areas. The mature adults return on odd-numbered years to the original spawning grounds, always during their second year of life (Table 1). The annual average weight of pink salmon in the Puget Sound net fishery varies between 5 and 6 pounds.

1.1.4 General Life History of Chum Salmon

Adult chum salmon, Oncorhynchus keta, spend less than 30 days in freshwater on their spawning migration. Coastal and Puget Sound rivers receive spawning runs of chum salmon from September generally through December, though fish enter some streams such as the Nisqually River as late as March. As in the case of pink salmon, chum salmon frequently spawn in the lower reaches of the river system and

near tidal areas. This species has been observed to spawn in tidal areas remote from any obvious surface freshwater streams. The fry begin their migration to saltwater immediately after emergence from the gravel. The juveniles may spend 3 to 4 months in shoreline areas in the saltwater. The adults spend 3 to 5 years in the ocean and return to spawn, normally during their third or fourth year of life (Table 1). The annual average weight of chum salmon in the Puget Sound net fishery varies between 10 and 12 pounds.

1.1.5 General Life History of Sockeye Salmon

Sockeye salmon, Oncorhynchus nerka, with few exceptions, enter rivers fed by lakes and usually spawn in tributary streams of those lakes but may spawn below the lakes in the outlet river. They also spawn on gravel beaches where subsurface upwelling occurs within the lakes. The adult spawning migration occurs during the summer and early fall months. One outstanding exception to this timing occurs in the Quinault River. These sockeye enter freshwater from January through July, with the peak of the run occurring during the last of May and the first of June.

The adult sockeye reside in the lake or stream until spawning occurs from September through December. On hatching in the following spring, the young enter the lakes where they spend usually one, frequently two, and occasionally three years feeding upon minute invertebrates. The seaward migration from the lakes usually occurs between March and May. Sockeye reside in the marine environment from 2 to 4 years. Mature fish return to spawn during their third to sixth year of life, but the fourth year is the

predominant age class (Table 1). The annual average weight of sockeye salmon in the Puget Sound net fishery varies between 5 and 7 pounds.

1.1.6 General Life History of Steelhead Trout

Steel head trout, Salmo gairdnerii, may enter the larger river systems of Western Washington during all months of the year. Two "races" of steelhead occur in Washington. Winter-run fish are found in almost all streams west of the Cascade Mountains which empty into saltwater. Summer-run fish occur in the Columbia River and its tributaries above Bonneville Dam and in about 20 percent of the major steelhead streams of Western Washington. Winter-runs move upstream from November to June and spawn in the early spring. Summer-run fish generally travel upstream during June, July, August, and September, but may be found as early as February in some streams. Summer runs lay over in deep pools until the following spring, at which time they too spawn. The spawning season for steelhead extends from February through June, usually peaking in March and April.

The eggs hatch and the fry emerge after 50 to 110 days in the gravel. Juvenile steel head normally spend 2 years in freshwater before migrating to sea. Seaward migration occurs principally from April through mid-May. The adults spend from 1 to 3 years in saltwater before returning to spawn for the first time, usually at the age of 4 years (Table 1).

The frequency of survival beyond the first spawning is low and is a function of energy expended in freshwater migration, as well as number of spawnings. Because of the extremely low survival,

repeat spawners are considered of only minor significance in management of the species. Just as in salmon hatchery egg taking operations, the adult winter steelhead are usually sacrificed. Except for a rare encounter of 8 and 9-year old fish, steelhead do not exceed the age of 7 years. The annual average weight of steelhead in the Puget Sound area sport fishery varies between 8 and 10 pounds.

1.1.7 Timing of Freshwater Life Phases - Salmon and Steelhead

The freshwater adult activity and juvenile development timing has been determined for the five salmon species and steelhead. The precise timing of upstream migration is influenced by a variety of factors, including maturity, water flow, and temperature. These timing data are shown by major river basins in Tables 2 through 17.

§ 1.2 Freshwater Habitat Areas

1.2.0 General Effects of Man's Activities

Early explorers' observations confirm that salmon and steelhead at one time used all streams open to them in the Pacific Northwest. They were the mainstay of a large population of Indians inhabiting the area. Due to man's activities, subsequent to the settlement of the area by non-Indians, and to other environmental changes, sections of streams or entire streams have been removed from salmon and steelhead production. However, all of the principal drainages of the Puget Sound and coastal areas are still utilized to some extent by spawning populations of salmon and steelhead. These drainages are shown in Figures 1 through 5.

1.2.1 Categories of Freshwater Habitat

In the Puget Sound area the types of fish production habitat vary a great deal. The types of production habitat are generally categorized into (1) the major rivers, (2) tributaries to the major rivers, and (3) the smaller independent streams running directly into saltwater. A further breakdown in stream classification separates each of the three basic categories into mountain, middle valley-lower valley, and lowland stream areas. Each offers somewhat different environmental conditions to which the individual species of salmon and steelhead have successfully adapted.

1.2.2 Major Rivers

Most of the major streams entering saltwater originate in mountain glacier fields, as do some of their larger tributaries. They provide a relatively stable water supply year-round from the snow packs, and periodic rainfall. As they move seaward, different types of aquatic environment are presented, ranging from cold, swift-flowing, high elevation streams, to the warmer, meandering lowland valley rivers. Spawning and rearing conditions vary considerably within these larger streams. Their upper reaches are generally characterized by having stream bottoms with large rocks and boulders, relatively short riffles and/or patch gravel spawning areas, and numerous shallow to moderately deep pools. Stream side cover usually consists of dense stands of timber. Basic productivity is usually lower than in the streams below due primarily to the lower water temperature and the fact that less nutrients are contained in the water. Fish utilization in the upper reaches of these major

streams is governed primarily by stream size and accessibility. These sections receive mainly chinook salmon. However, many are also utilized by good numbers of coho and a few pink salmon.

The middle and lower valley areas offer numerous long and broad riffles, many channel split gravel bars, and extensive spawning habitat. Bottom material is generally smaller than that found in the upper reaches, and with the decrease in stream gradient more sand and silt is usually present. Long, and often very deep pools provide protection as well as excellent feeding zones for fish. Stream side cover is generally sparse, ranging from intermittent sections of timber in the upper valleys, to bare stream banks as the river courses through cleared farm land, small communities, and often through urbanized areas near the river's mouth. The diversified spawning habitats that are present in these sections of major rivers make them highly suitable for use by a number of salmon species. Chinook, pink, and chum salmon represent the predominant spawners, and if sockeye are indigenous to the system, they too will utilize this broad and varied habitat.

1.2.3 Tributaries

Tributaries to the major rivers also vary greatly in the type of aquatic habitat they offer. Again, this is dependent to a great deal on elevation and gradient, ranging from the high elevation mountain streams to the low valley type streams. In either case these streams range in size from those just a few feet wide to those nearly equal to the major rivers into which they drain. At higher elevations such streams are generally cold and swift-flowing, offering intermittent

riffle and patch type spawning gravel. Stream side cover is usually dense in the higher elevation streams, as it is in the as yet undeveloped lower elevation areas. Middle and lower valley tributaries are generally more productive, being warmer and containing more nutrients. They tend to have a good pool-riffle balance and provide considerable, generally smaller sized gravel, spawning area.

The tributaries are generally shorter and accessibility more limited than the river mainstreams. In total, they usually provide a major portion of the available spawning habitat. Many of these smaller streams have greatly reduced flows in the summer. They are the major spawning habitat for coho salmon and steelhead and are used to a great extent by pink and chum salmon. The larger tributaries also receive good numbers of chinook salmon.

1.2.4 Independent Streams

The independent streams draining directly into saltwater offer production habitat similar to the lower to middle valley river tributaries. Stream gradients are generally moderate, with gravel riffles abundant. Most of these streams flow through second or third growth timber and immediate bank cover consisting of dense deciduous growth for much of the streams' length. Many of the smaller streams experience reduced flows in the summer months. These streams are generally warmer and highly productive. Virtually all of the independent streams that are accessible produce good-to-excellent numbers of coho salmon and steelhead. The lowland areas are excellent producers

of chum salmon, and some of the larger streams accommodate chinook.

1.2.5 Specific Rivers Having Indian Fisheries

Brief descriptions of some of the river systems on which the principal current Indian fisheries are located are set out in Appendix I.

§ 1.3 Comparative Abundance

In nearly all annals and journals of early Pacific Northwest explorers, the writers remarked again and again on the prevalance *[sic]* of salmon as native food.

According to observations made by Hudson Bay Company fur trappers, the Lewis and Clark expedition, and earlier by Captain James Cook, salmon and steel head apparently used all freshwater streams open to them.

With the invention of the tin can during the mid-1800's, the salmon fishing industry began an intensive exploitation of the species which has continued to the present. Catches of all species of salmon in Puget Sound, e.g., have ranged from a high of over 39 million fish in 1913 to a low of just over a million fish in 1944. The largest single-producing stream to Puget Sound fishermen is the Fraser River located in Canada. The Fraser River system produces exceptionally large numbers of sockeye and pink salmon. A slide occurring in 1913 (due to railroad construction) blocked a significant portion of the sockeye spawning grounds. Catches of this species declined drastically and have not yet fully recovered from this disaster. The average annual catch of about 3.3 million sockeye in the period 1950-1971 was only

36 percent of the average catch for the years 1894-1913. The 1959-1971 catch of Fraser River pink salmon has averaged about 4.5 million fish, or about 20 percent of the potential catches from the estimated capability of the system.

Other species of salmon destined for Puget Sound watersheds have not declined to the degree observed for sockeye and pinks in the Fraser River. The natural freshwater habitat, although depreciated and reduced in area by watershed alteration, pollution, and other man-made activities, continues to produce an economically valuable resource. With contributions from artificial propagation stations, a variety of fisheries are active in pursuit of harvestable quantities of salmon and steelhead.

Extensive commercial exploitation of salmon began in the mid- to late 1800's. Statewide salmon and steelhead commercial catch records have been kept by the U. S. Bureau of Fisheries since 1891 (Tables 18-22). The Washington Department of Fisheries has compiled annual records of the statewide salmon catch since 1935 (Table 23). Beginning in 1946, these records have included salmon sport catches. Estimates of the statewide steelhead sport catch have been made by the Washington Department of Game since 1946 (Table 24).

Since the earliest time of record keeping the accuracy of commercial salmon catch data has become increasingly reliable. Improved communications and staffing by the management agencies and their recognition of the importance of accurate catch records has improved the reliability of these data. In the case of steelhead, the Washington Department of

Game has not gathered commercial landing data, and until 1964 the Washington Department of Fisheries collected it only incidental to collection of salmon catch data. Since 1964 the Department of Fisheries has ceased collection of steelhead data except on the Columbia River. As a result there is no reliable data on the commercial take of steelhead for the coastal and Puget Sound areas since 1964.

Catch records are available from the earliest days of the fishery, but these cannot be directly used to assess the run sizes since some species were fished preferentially and escapements were not estimated. While some races of salmon are extinct, none of the species are endangered and all support various fisheries. The most significant change over the years is that the salmon fisheries have moved farther outward from the river mouths so that, generally, fewer numbers are arriving at the river. There are exceptions to this, particularly for some runs augmented by artificial propagation. Following is a partial resumé of the relative statewide catches of salmon and steelhead by Washington fishermen during the years 1935-1970 (Tables 18-24).

1. Chinook salmon catches ranged from a high of 13.7 million pounds in 1941 to a low of 4.6 million pounds in 1960. The catches remained relatively stable from 1935 to 1955 with an average annual catch of 10.4 million pounds. The chinook landings decreased from 1955 to 1960. Between 1960 and 1967 they remained relatively stable with an average annual catch of 5.7 million pounds. The chinook landings increased from 1968 to 1970 (Figure 6).

2. Coho salmon catches have ranged from a high of 17.4 million pounds in 1952 and 1970 to a low of 2.9 million pounds in 1960. The landings have fluctuated greatly during this period showing no trends. The average annual catch for the last 10 years of this time period was 10.1 million pounds (Figure 6).

3. Pink salmon catches have ranged from a high of 54 million pounds in 1947 to a low of 4.6 million pounds in 1965. The landings decreased from 1935 to 1943 and then sharply increased until 1947. Catches of pink salmon decreased between 1947 and 1970 (Figure 6).

4. Chum salmon catches have ranged from a high of 15.2 million pounds in 1946 to a low of 2 million pounds in 1961 and 1965. The catches declined during the last 20 years of the time period (Figure 6).

5. Sockeye salmon catches have ranged from a high of 35.1 million pounds in 1954 to a low of 1.4 million pounds in 1947. Between 1948 and 1970 the landings were relatively stable with an annual average catch of 10.2 million pounds (Figure 6).

6. Between 1947 and 1971, the catch of winter steelhead by anglers increased. It ranged from a high of 249 thousand fish in the 1965-66 season to a low of 23 thousand in 1947-48. Landings in the Puget Sound and coastal area Indian fisheries since 1945 have ranged from 21 thousand pounds in 1951 to 360 thousand pounds in 1963.

§ 1.4 Environmental Needs of Salmon and Steelhead

1.4.0 Introduction

The dependence of salmon and steelhead on suitable freshwater environment places them in direct competition with other multiple uses of the water. To determine the effect of man-made changes in the environment, requirements of anadromous fish in freshwater must be known.

Salmon and steelhead indigenous to Washington State waters are adapted to a variety of specific habitat conditions essential to their continued production. Although specific requirements by each species may vary slightly, generally their needs are quite similar. These include, but are not limited to, (1) access to and from the sea, (2) an adequate supply of good-quality water, (3) a sufficient amount of suitable gravel for spawning and egg incubation, (4) an ample supply of food, and (5) sufficient shelter.

These are the basic requirements and a detailed description of each is covered below. It is important to remember that alteration of even one of these essential, finely-balanced requirements will affect the production potential.

1.4.1 Access to and from the Sea

Anadromous fish must have free access to and from the sea. To protect the spawning and rearing environment while not providing free access for the adults or unhindered outmigration for the Juveniles would, of course, be pointless. Since adult salmon, and to some degree adult steelhead, do not feed heavily in freshwater, they must sustain themselves on their

storage of energy once they leave the marine environment. Thus, it becomes important to assure their upstream passage without delay which would cause them abnormal expenditure of energy. Such delay in their migratory timing can be as catastrophic as a total block.

1.4.2 Adequate Water Supply

An adequate water supply in itself involves a number of characteristics, each of which presents rather narrow limitations on the production capabilities of a stream. Generally, an optimum volume of well-oxygenated water moving over the natural stream bed provides the necessary space and conditions for fish spawning, egg incubation, rearing, food production, and protection. The timing of the freshwater life phases of these fish is directly affected by the seasonal flow patterns. Successful fish production is also dependent upon optimum water temperatures. The temperature range most favorable to salmon and steelhead through all life phases is 50 to 60 degrees Fahrenheit. Again, the seasonal pattern and its, ranges dictate the production capability of the aquatic environment.

Water quality also presents very narrow limits with respect to aquatic productivity. The water chemistry provides certain nutrients that are picked up naturally as the stream flows seaward. Also the water must be free of pollutants that might reduce or eliminate basic food production or cause direct adverse effects to fish.

1.4.3 Adequate Spawning - Egg Incubation Areas

The stream bed of a river must contain a sufficient amount of suitable gravel riffles for spawning and incubation of deposited eggs. These riffle areas often serve to separate use by the various species of fish. The physical condition of these riffle areas, which can limit the capacity of spawning, include gravel size, amount of sand or silt in the gravel, degree of gravel compaction, and depth/ velocity conditions of water flowing over the riffle. To facilitate production, these riffles must remain relatively free of silt overburden and must provide adequate flow through the gravel itself. Each of the aforementioned characteristics serves to restrict what species and number of fish will utilize the riffles, as well as to limit the overall production potential.

1.4.4 Ample Food Supply

The first requirement for an adequate food supply for fish is that the water offer the basic nutrient productivity gaged by the natural minerals, acidity, temperature patterns, and amount of dissolved oxygen. Relative to this basic productivity is the aquatic insect supply, a primary food. Insect production falls into seasonal patterns which are closely allied to the timing of the fish's freshwater juvenile residency.

1.4.5 Shelter

In order that the fish migration, spawning, and juvenile rearing life history phases take place without undue losses, protective cover is vital. Natural fish production streams usually provide a good pool-riffle

balance, with the pools offering deep and, most often, shaded protection. Additional cover is normally provided by stream bank vegetation, wind-felled logs in or over the stream, and by large boulders which create eddies and shaded zones.

§ 1.5 Habitat Condition Trends Affecting Today's Fishery Resources

1.5.0 Introduction

Over the years, there has been a gradual deterioration and loss of natural fish production habitat in Washington State streams. Although there are many individual factors contributing to this, the general trend toward reduced production habitat is more the result of a combination of activities performed by man--activities which alter and destroy one or more habitat conditions required for successful fish production. Generally, these factors can be categorized under the broad headings of watershed alterations, water storage dams, industrial developments, stream channel alterations, and residential developments.

1.5.1 Effects of Watershed Alteration

The most significant watershed alteration within the State over the past has resulted from extensive logging operations. Logging and road building frequently result in serious degradation of water quality. Even in the uppermost reaches of some watersheds, aquatic environments have been degraded as a result of logging or log road building practices that did not consider the total impact on the ecosystem. The most obvious and most adverse impact of improper logging on water quality is the increased

sediment load caused by erosion of soils from the surface of logged-over areas and from roads. Sediment loads seriously reduce natural propagation by fish by silting of spawning gravels and the smothering of eggs and fry. Often these spawning areas are rendered useless for extended periods of time.

Logging of all trees to the water's edge and removal of other stream-side vegetation expose the stream to the full impact of the sun's heat (solar radiation), causing temperature increases that are damaging to the fishery resource. Conditions of heavy siltation, poor water quality, and unnaturally high temperatures often encroach over stream areas some distance below the actual logging operations. As a result, both spawning and rearing habitats suffer.

In addition, improper logging operations leave organic debris in and adjacent to stream channels. This debris and slash often result in damming the streams, creating virtual barriers to anadromous fish migration. As these organic materials decompose, measurable increases in dissolved chemicals and plant nutrients occur in the streams which cause the growth of bacterial slimes and algae. Increased plant activity also causes a reduction of dissolved oxygen in the intra-gravel waters of the spawning beds as well as in the rearing pools.

Extensively cleared watershed areas tend to exhibit a much different run-off pattern. There is usually a greatly intensified momentary run-off associated with any heavy rainfall. Due to lack of natural water retention, unnatural low flows will also occur in the late summer. Directly associated is extensive erosion of stream bed and stream bank

areas often leading to a total destruction of the fish-production capacity of the streams.

Another habitat alteration which has caused extensive damage to salmon and steelhead runs has been irrigation. The heaviest impact of irrigation is the removal of water from the stream during the critical low-flow summer months. Irrigation through water removal during the summer rearing months often reduces the rearing capacity of the stream. This occurs directly if the return water is at temperatures too high to support salmonid fishes, or indirectly by reducing the remaining volume of flow to a point where solar radiation will heat the water, causing the stream to become unsuitable for salmon and steelhead during the summer months. Irrigation may also cause an enrichment of the stream by returning water over-enriched with fertilizers which may cause an aquatic plant bloom. Such plant blooms may subsequently cause a critical lack of oxygen due to the decomposition of the added organic load in the stream. This water may also contain harmful pesticides and herbicides.

The diversion of water, and consequently juvenile fish, from the stream by unscreened ditches or pumps is a particularly critical problem during the spring and summer outmigration periods. Today, most irrigation districts make extensive use of mechanical screens. However, the magnitude of water removal is such that not all diversions are screened.

1.5.2 Effects of Water Storage Projects

The most dramatic change, often causing a complete loss of the salmon and steelhead environment on stream systems in Washington State,

is the series of dams which has been completed in the last 40 years. A number of Washington's major rivers, plus many of the larger tributaries, have been adversely affected by the placement of water storage dams. Whether they are for the purpose of domestic and industrial water supply, electrical power, or flood control makes little difference. They all impose a number of habitat alterations, most being detrimental to fish production. Several obvious changes in the river environment are known to affect salmon migration. For instance, timing and pattern of upstream migration is associated with the river discharge. Since flood control and hydroelectric dams reduce and prolong the average discharge during high run-off periods when salmon or steelhead are migrating upstream, this can seriously delay the spawning migration. Migration and spawning of adult salmon and steelhead are known to be dependent on energy stores accumulated during ocean residence, and any undue energy expenditure or inefficient utilization of energy during migration can prevent successful completion of the spawning act.

Unless located above natural fish-passage barriers, these projects interrupt and usually block fish migration, preventing adults from reaching their natural spawning grounds. Collection of migrating adult salmon and steelhead for transportation over dams causes many problems, but most importantly it causes another delay in their upstream migration. Short delays of only a few days are known to reduce the productivity of some runs.

Dams not only cause environmental changes in downstream areas but also create reservoirs that can have serious adverse effects on upstream habitat. It is

obvious that reservoirs represent a radical departure from the natural migratory environment and that the altered velocities, temperatures, depths, and other factors might interfere with upstream migration. Reduced velocities in reservoirs result in increased heating of the surface water during the summer. Changes in water temperature affect the rate of energy utilization, swimming ability, and disease susceptibility of these fish.

Dams can produce a multitude of environmental changes that affect spawning efficiency, the survival of incubating eggs, and the emergence of newly-hatched fry. Successful spawning and egg incubation can occur only within certain ranges of environmental conditions.

The most obvious effect of a dam on a spawning stream is the destruction of spawning beds by creation of the reservoir itself. Alterations of the normal discharge cycle can also reduce the availability of preferred spawning velocities and depths. Another less obvious effect on egg mortality is fluctuating temperatures that do not follow the natural order due to sporadic discharges from the reservoir. Abnormal temperatures during the incubation period may cause a high rate of egg mortality and may cause premature or delayed hatching and emergence. Reductions in flow can reduce the subsurface flow that supplies oxygen to incubating eggs and removal of metabolic waste products. Velocity changes resulting from sporadic or extended discharges can alter the gravel composition of spawning areas and lead to increased silt deposition that would reduce the percolation flow to incubating eggs.

One major effect of dams on downstream migrating juvenile salmon and steelhead is the direct mortalities incurred in passage over spillways and through turbines. Another problem is the passage of the juveniles on their seaward migration through long, slow-moving reservoirs. The temperature regime of the reservoir may alter the behavior of the young fish, and the reduction in water velocity may result in delaying the juveniles beyond the normal migratory period. The reduced velocities in the reservoir create a more favorable environment for predators, therefore causing increased predation on the young salmon and steelhead.

1.5.3 Effects of Industrial Developments

Industrially-oriented developments have served to restrict, and sometimes eliminate, fish-production habitat in many Washington State streams. Water supply systems, usually developed for both industrial and domestic purposes, often reduce the amount of available water required for fish production and nearly always alter natural streamflow patterns and/or water quality characteristics. Such conditions are usually prevalent in the upper valleys and mountainous regions where spawning and rearing life phases of fish are affected.

In the more heavily populated and industrialized areas, major rivers and/or their estuaries, and sometimes even small tributaries or independent drainages, suffer from water pollution. This may exist as periodic intensive pollution of permanent low-grade reduction of water quality. Both domestic and industrial pollution can reduce or eliminate natural rearing habitats thus producing

less food and generally causing conditions that sustain fewer fish. Not only can some industrial wastes be toxic to the fish, but the decomposition of sewage can reduce the dissolved oxygen to a point where it will adversely affect salmon and steelhead. Detection of pollution-caused kills of anadromous fish is difficult, but it contributes significantly to mortality of both adult and juvenile fish. It can ruin the habitat of these fish and prevent them from entering important spawning and rearing areas.

1.5.4 Effects of Channel Alteration Projects

Channel straightening and channel relocation projects serve as two of the major problems affecting Washington State's fish production streams. For many years, stream dredging and channelization have been carried out with little attention to the possible long-term effect of these operations on anadromous fish. These projects are generally associated with flood control activities conducted on the major rivers, as well as on many of their larger tributaries.

The channelization of streams eliminates the pools and riffles of a natural stream, thereby eliminating necessary cover and feeding areas for rearing and migrating fish. It may also destroy spawning beds by altering the flow of the stream, making it into a straight raceway. Dredging gravel from stream beds for use, in road building and other uses destroys not only the spawning areas but may also destroy eggs and fry that are already in the gravel. Both dredging and channelization produce large amounts of silt which are deposited downstream, and may ruin downstream spawning areas.

1 .5.5 Effects of Residential Developments

Still another major factor affecting fish production habitat is the trend toward suburban housing development. This consists of anything from summer cabins to large community projects. They are often located adjacent to tributaries of the major rivers and are frequently situated directly on some of the best fish-production habitats that exist in Washington. The overriding effect of such projects is the elimination of natural stream and stream-side cover. Segments of the watershed are essentially paved with gutters, and run-off water from roofs, driveways, and streets is channeled directly into the stream. Often large quantities of additional water are imported into these areas, only to be released as an added supply, one that is somewhat different in quality from the natural run-off. The results are changes in stream run-off patterns; increased flooding and, hence, increased stream bank and stream bottom scouring; and, particularly during the summer months, a deterioration to some degree of the existing water quality. Secondary effects associated with such developments include culvert and bridge installations, stream bed modification, and a disruption of natural fish behavior due to the fact that there simply is more activity conducted in and around the stream proper. The result is a tendency for discontinued use by major segments of fish populations that would normally inhabit these waters, and a greatly reduced spawning and rearing capacity of the stream.

§ 1.6. Ocean Migration of Puget Sound and Washington Coastal Salmon and Steelhead

It is intriguing and important to the fisheries management biologist to examine the vast amount of ocean migration data which have been obtained through various tagging and fin-marking studies carried on by fisheries agencies, both Federal and State, over the years. Ocean movements are generally known for all species and well established for some stocks. While studies of marine migrations have been directed entirely to salmon species, incidental data on steelhead has begun to disclose definite patterns of ocean residency. It is immediately obvious that salmon and steelhead do not recognize state or even international boundaries and that a complex intermingling occurs between stocks from Washington, British Columbia, Oregon, California, Alaska, and Idaho (Figures 7-9).

1.6.1 Chinook Salmon - General

For administrative purposes of the Washington Department of Fisheries, chinook salmon stocks of Washington are basically divided into three management areas: (1) Columbia River, (2) coastal, and (3) Puget Sound. Fraser River salmon stocks constitute a fourth group of major importance to Washington fishermen specifically, and U. S. fishermen in general while the Columbia River is a major producer of chinook and other salmon taken in the case area, coverage of their distribution in the ocean catch is not herein discussed in detail.

1.6.2 Washington Coastal Chinook Stocks

The chinook-producing streams tributary to Grays Harbor and Willapa Bay, plus the rivers draining the northern Olympic Peninsula and emptying directly into the Pacific Ocean, constitute one major chinook-producing "group." The Olympic Peninsula stream data are projected from studies on Grays Harbor and Willapa Bay stocks. In this area, a dominant northward movement is apparent with various marking experiments indicating that over 75 percent of the ocean catch occurs off British Columbia and Southeastern Alaska (Figure 7). The ocean availability of these fish appears to be considerably lower than for lower Columbia River fall runs, however, and the percentage of the runs escaping the ocean fisheries is greater. Returning fish make important contributions to the commercial net, river sport, and Indian fisheries.

1.6.3 Puget Sound Chinook Stocks

Puget Sound chinook exhibit the typical northward migrations shown by other stocks of the species, although a minor segment disperses southward (Figure 7). The magnitude of this latter group diminishes rapidly from north to south along the Washington coast, becoming quite minor off the Columbia River mouth. The prevailing ocean migration pattern results in an ocean catch distribution of about 90 percent of the total ocean catch occurring off British Columbia and Southeastern Alaska and only about 10 percent off the Washington coast. On return from their ocean residency most of the U. S. Puget Sound stocks enter through the Strait of Juan de Fuca; however, a portion

of some, such as those destined for the Bellingham and Samish Bay areas, it is believed to return through Johnstone Strait. From the standpoint of Washington salmon fisheries, these stocks have two important "positive" features. First, sizable numbers remain in "inside" waters for appreciable periods and these immature, feeding fish make important contributions to the sport fisheries. South of the Tacoma Narrows area they are the dominant component of the 2-year-old chinook sport catch, while older fish bolster the sport fisheries throughout Puget Sound. Others are taken in the Strait of Juan de Fuca, in the San Juan Islands, and in the Strait of Georgia (Canada) sport fishery.

Second, the immature Puget Sound fish that do move seaward are definitely less available to the ocean fisheries than several other major stocks, such as lower Columbia River fall-run chinook. Experiments have shown that in the ocean they are taken mainly as maturing 4-year-old fish. Consequently, a greater percentage of the run returns to Puget Sound for exploitation by the commercial net, sport, and Indian fisheries.

1.6.4 Fraser River Chinook Stocks

Chinook produced in the Fraser River system and other large rivers draining Southern British Columbia show similarities to Puget Sound fish. A typical northward movement is evident, with the bulk of the ocean harvest occurring off British Columbia and Southeastern Alaska (Figure 7). A lesser segment moves southward to enter the Washington ocean catches. The availability of the fish and ages at capture also appear to be roughly comparable to

U. S. Puget Sound stocks. Substantial numbers of immature, feeding chinook remain in inside waters for extended periods of time and enter the sport fisheries. Salmon produced in British Columbia streams appear to be the dominant stock in the Strait of Georgia and San Juan Islands sport fisheries. Sizable numbers are also taken in the Strait of Juan de Fuca and the northern portion of inner Puget Sound. Returning adults are the dominant stocks in the Canadian net fisheries of Georgia Strait and the Fraser River and the San Juan Islands-Point Roberts fisheries of Washington.

An interesting picture is presented by examining the freshwater recoveries of immature chinook tagged in several important Puget Sound sport fishing areas. The recovery areas include the Fraser and Columbia River systems plus nine Puget Sound drainage areas (Figure 10). It is evident that the success of fishing in any given marine area is dependent on the production from many river systems; or, perhaps more meaningful, the production from each drainage, resulting from both natural and artificial means, is important to many specific fisheries. Thus, if the potential of any given river is physically impaired by power dams, water pollution, or watershed damage, the impact on the stocks and subsequent harvest can be much more extensive and far-reaching than commonly presumed.

1.6.5 Chinook Salmon - Overall

Through a general understanding of each major chinook stock in regard to population size, ocean migration, and availability factors, it is possible to estimate the river origins of major stocks contributing

to each definable Washington fishery. In Figure 11, the stocks are shown in order of their importance. For example, off Sekiu and Pillar Point on an average season basis, Columbia River fish are the largest single contributor to the catch, followed in order by Puget Sound, Fraser River, Washington coastal, and Oregon coastal fish. Many other stocks are often present but are not considered to be of major significance to the local fishery. During certain periods of time, this picture does not always hold true, but research studies enable the manager to define catches by specific time intervals for many of the fisheries involved. These data are based upon the digested outcome of literally hundreds of different investigations.

1.6.6 Washington Coastal Coho Salmon Stocks

Coho produced in Grays Harbor and Willapa Bay tributaries differ markedly from their nearby Columbia River counterparts. The results of studies from these drainages have been projected by the Washington Department of Fisheries to depict the marine migration patterns of the Peninsula coastal streams. Their primary dispersion occurs to the north (Columbia River coho primarily disperse southward), with the ocean harvest being mainly in the fisheries operating off central and northern Washington (Figure 8). In addition to those taken in the Washington troll fishery, sizable numbers move off Vancouver Island and are exploited by the Canadian troll fleet. Others enter the outer portion of the Strait of Juan de Fuca, contributing to the Canadian and U. S. net fisheries in that area and to the Washington sport fisheries. Returning adults enter the landings of the Indian and river sport fisheries. The harvest of

"jacks" reaches significant proportions only in the river angler's creel. The movements of coho produced in Washington coastal streams north of Grays Harbor have not been carefully studied, but the limited evidence available points to significant ocean movements both to the north and south.

1.6.7 Puget Sound Coho Salmon Stocks

Puget Sound coho exhibit the typical north and south migrations in the ocean, with their abundance declining steadily from south to north along the west coast of Vancouver Island and from north to south along the Washington coast line (Figure 8). Apparently, relatively few of these fish move south of the Columbia River or north of Vancouver Island. As a result of this migration pattern, the ocean catch distribution is divided about equally between the fisheries off Washington and British Columbia. These stocks also contribute materially to the Washington and Canadian net fisheries operating in the Strait of Juan de Fuca and to Washington's Straits sport fishery and net and sport fisheries of inner Puget Sound.

Puget Sound coho differ markedly from coastal stocks discussed previously in that sizable numbers remain in Puget Sound and never migrate to the open sea. These resident, feeding fish form the backbone of the sport fishery, with drainages nearest the available foraging (and fishing) areas often being the main contributors to the catch.

1.6.8 British Columbia Coho Salmon Stocks

Coho produced in British Columbia streams are known to be of importance to several Washington

fisheries. Fish from the west coast of Vancouver Island and the Strait of Georgia drainages, particularly the Fraser River, move south off the Washington coast and contribute to the troll and sport fisheries (Figure 8). Their abundance, however, diminishes rapidly from north to south. Fish from the Strait of Georgia tributaries make substantial additions to the net fisheries of the Strait of Juan de Fuca and San Juan Islands. Resident coho of the type noted in Puget Sound appear to be the dominant constituent of the San Juan Islands sport catch.

1.6.9 Coho Salmon - Overall

It is possible to estimate, with a reasonable degree of accuracy, the major coho stocks contributing to Washington's salmon fisheries on an annual basis (Figure 12). In contrast to chinook, the major stocks of coho are much more likely to originate in drainage systems near each definable fishery. This phenomenon is produced by several interrelated factors. Since coho, on the average, spend considerably less time in the marine environment due to their younger age at maturity, their distance of migration tends to be much less than chinook. They also commonly show random dispersions both to the north and south in contrast to the predominantly northward movements of chinook. Lastly, and probably most important, their "catchability" or susceptibility to hook-and-line gear does not diminish as rapidly as fall-run chinook as they mature and approach their streams of origin.

1.6.10 Pink Salmon

Pink salmon taken in the ocean fisheries originate from Canadian streams (mainly the Fraser)

and Puget Sound tributaries. Migrations are both north and south with the primary diffusion northward. Catch distribution is shifted northward and favors the Canadian fishery off the west coast of Vancouver Island as the pinks return to spawn. They are also taken in the Strait of Juan de Fuca by net and sport fisheries of both countries. Significant portions of the pink salmon runs occasionally migrate toward spawning grounds in both Canada and the United States through Johnstone Strait and the Gulf of Georgia. When this occurs, a sizable catch is made in these areas by Canadian net fisheries. Both commercial and Indian net fisheries take considerable quantities of pinks as this species nears or enters natal streams.

1.6.11 Chum Salmon

Chum salmon of all origins have declined drastically over the past two decades. Few of this species are caught in the ocean fisheries and their migration patterns are not fully known or understood. Feeding and migration studies conducted in the Gulf of Alaska by the Federal Government indicate the presence of many feeding chum salmon in this area. Results of tagging studies to date indicate that chum salmon of Washington origin are not a major component of the chum salmon populations in the Gulf of Alaska.

2.6.12 Sockeye Salmon

By far the major river system contributing to fisheries for sockeye is the Fraser River. Sockeye exhibit a northerly movement, and upon their spawning migration, increasing numbers are taken by Canadian trollers off the West Coast of Vancouver

Island. The bulk of the harvest is by Washington and Canadian net fishermen in the Strait of Juan de Fuca and the San Juan Islands as the fish near the mouth of the Fraser. A significant segment of Fraser-bound sockeye migrates through Johnstone Strait and enters the Fraser without first entering U. S. waters. Canadian net fisheries take almost the entire harvestable portion of this segment.

Lake Washington sockeye exhibit the same northerly movement as Fraser stocks, but evidence of similar migrations through Johnstone Strait has not been found. Thus, the major portion of this run is assumed to enter Puget Sound by way of the Strait of Juan de Fuca. The entry of the Lake Washington portion of this run coincides with the entry of the early Fraser River portion.

1.6.13 Steelhead

Knowledge of the ocean phase of the steelhead's life history is relatively limited. Some information has become available incidental to high seas salmon investigations, which indicates that Washington State steelhead spend at least a part of their ocean residency in the Alaskan gyre.[1] Figure 9 shows the ocean areas inhabited by Washington, Oregon, and California steelhead stocks. Steelhead from Canadian and Alaskan streams commingle in the ocean with the southern stocks.

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[1] A gyre is an ocean eddy which, in the north Pacific, rotates over a large area in a counter-clockwise direction. Salmon and steelhead are believed to swim generally downstream with this current.

§ 1.7 Inshore Migration of Salmon and Steelhead

1.7.1 Migration Routes of Salmon within Puget Sound

Figures 13-17 show the approximate average pattern of migration in Puget Sound for each of the five species of salmon. As a group, these figures illustrate the geographic intermingling of all species, some of which have representative stocks from virtually all Puget Sound streams. The complexity of regulating the Puget Sound marine area fisheries is further appreciated through this illustration. This is particularly true for chinook, coho, and chum salmon.

1.7.2 General Migration Timing of Salmon within Puget Sound

The general timing of outmigration (from freshwater to marine feeding grounds) of salmonid juveniles has been previously discussed in Sections 1.1.0-1.1.7. The general timing of adults entering freshwater is also presented in those sections. It is the purpose of this narrative to present more specific run-timing data where available.

The management areas (fishing areas and preserves) established and used by the Washington Department of Fisheries in regulating the Puget Sound commercial salmon net fisheries are shown in Figure 18. Commercial salmon fishing is generally prohibited in the salmon preserves. The combined "catch area" designations which were used in developing the run-timing curves are shown in Figure 19. These run-timing curves (Figures 20-24) have been developed from daily commercial catch data

collected over a number of years, and have been smoothed by 5-day averages. Except for chinook, these figures represent the average timing of the run passage through each specific catch area. Commercial net fishing has not been permitted during the early portion of the chinook run and, therefore, run-timing data are not available as such. However, occasional test fishing has established that this timing curve is generally bell-shaped.

The spring chinook run is the first salmon species to enter Puget Sound through the Strait of Juan de Fuca on its migration toward freshwater. This run is closely followed by summer and fall chinook and sockeye salmon during June, July, and August. Coho begin entering Puget Sound during the latter part of August and continue throughout September and October. During odd-numbered years, pink salmon enter between the chinook and coho runs. Chum salmon enter from September through December with the peak occurring during October and November.

The above description is general. The latter part of one run usually overlaps the beginning of the following run. If low water conditions exist in the natal stream, these runs may delay at the stream mouth in such a manner that there is little timing difference even between the peaks of the different runs. There are many exceptions to the rule. These runs are made up of segments bound for all major rivers in Puget Sound. Individual run segments may vary depending on genetic and environmental factors.

1.7.3 General Migration Timing of Salmon and Steelhead in Coastal and Puget Sound Rivers

The same type of data used to develop the curves introduced in the preceding section have been developed over a number of years for some Indian river fisheries, principally those on the reservations. Records of off-reservation landings are incomplete. Figure 25 shows the general location of these fisheries, both in Washington coastal and Puget Sound drainages. Figures 26 through 34 provide timing curves of steelhead and Figures 35 through 41 provide timing curves of chinook, coho, and chum salmon, and where present, pinks and sockeye as they pass through several of these Indian river net fisheries.

As can be seen from these figures, a general statement concerning timing of river entry cannot be made. Each river must be looked at individually. Moreover, run-timing varies from year to year depending on weather and run-off conditions. In marine fishing areas, the different salmon runs follow a general migration timing pattern, but as they approach or enter the natal stream they tend to develop a timing which is unique to that particular run and river.

§ 1.8 Natural and Artificial Propagation

1.8.0 Introduction

Artificial propagation programs and efforts are discussed more extensively in Part II of this report. This section is limited to a brief summary of the relative extent of the contribution of such propagation

to the total resource available to Washington Puget Sound and coastal areas.

In reviewing all figures which denote the percentage of natural versus artificial production harvested in the various fisheries, it must be remembered that these figures represent averages. As the level of artificial production rises and the level of natural production fluctuates due to environmental changes, these figures also change, usually on an annual basis. In cases where the timing of the runs bound for a hatchery is slightly different than the natural run-timing, the contribution to a fishery may also fluctuate greatly on a weekly or even a daily basis.

1.8.1 Chinook Salmon

The Washington Department of Fisheries estimated that 40 percent of the total fall chinook catch in Washington coastal and Puget Sound fisheries can be attributed to hatchery production. In the case of fall chinook which enter the Strait of Juan de Fuca and Puget Sound net fisheries, both United States and Canadian, 40 percent are estimated to be of Fraser River stock and 60 percent from Puget Sound streams. Thirty-six percent of this latter figure are estimated to be of hatchery origin.

Spring and summer chinook result almost entirely from natural production, although major strides are being made in the artificial production of spring chinook. Artificial means of production are just beginning to be adapted to summer chinook.

1.8.2 Coho Salmon

Coho salmon also have been successfully adapted to artificial production. Therefore, as with chinook, the percentage of annual harvest which can be attributed to natural production fluctuates greatly, depending upon the success of the natural spawn and the level of the hatchery releases into each specific river. Daily and weekly fluctuations also occur because of the differences in migration timing between natural and artificially produced stocks. Due to the more rigid 3-year life cycle of the coho and the freshwater rearing phase of these fish, the annual natural production of coho tends to fluctuate more than does the fall chinook production.

Of those coho taken in the Puget Sound net fisheries, 20 percent are estimated to be of hatchery origin. On a weekly basis, these percentages may be in excess of 90 percent or as low as 0 percent, depending upon the timing and production level of each specific hatchery, the origin of the fish, and levels of natural production.

1.8.3 Pink, Chum, and Sockeye Salmon

Except for limited success with chum and pink salmon at specific hatcheries, these three species have not yet been successfully adapted to artificial production to the degree chinook and coho have. Therefore, the total production for these three species can be essentially attributed to natural production. There are presently no widely employed means of supplementing the natural production of these species as there is with chinook or coho. If an area does not receive an adequate spawning escapement, or if man-made or natural environmental stresses cause poor

survival of these species, there presently is no way of replacing this loss by artificial means.

Although the means of propagating these fish artificially within a hatchery has not been extensively developed to date, some progress is being made in the field of developing artificial spawning channels. An artificial spawning channel is basically a man-made stream in which optimum spawning conditions have been developed. Water flow, turbidity, predation, and gravel size are controlled so that adverse man-made and naturally occurring environmental phenomenon (floods, freezing, drought) rarely affect the survival of the spawn from egg to emerging fry. These channels have been successfully developed at limited locations for sockeye (Baker River), chinook and coho (Columbia River), chum (Vancouver Island, British Columbia), and pinks (Fraser River).

The Department of Fisheries is presently developing a chum and pink egg incubation channel at the Skagit Hatchery with plans to develop these channels in other locations also. These channels differ from the artificial spawning channel described above in that the eggs and sperm are taken artificially. The fertilized eggs are then placed in incubation trays rather than in the gravel. Plans also call for short-term feeding prior to release.

1.8.4 Steelhead

Steelhead hatchery operations form an important part of the management program in Washington. Their importance will increase with continued water development and diversion, environmental deterioration, and the reduction in suitable spawning areas as well as increased

recreational demands. Similar to coho, the steelhead production in the natural environment is controlled greatly by the quantity and quality of stream discharge during the annual low flow periods. In the case of steelhead it is particularly critical since they most commonly spend two years in freshwater before migrating to sea. A large portion of the Game Department's scientific investigations on steelhead has been directed toward improving the use of the hatcheries as a management tool. Game Department records indicate that good survival (8-10 percent) from smolt to adult has been experienced at some facilities.

In recent years the use of rearing ponds has proven biologically and economically feasible and is being employed increasingly in the steelhead management program.

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II. MANAGEMENT OF THE RESOURCE

§ 2 Management of the Resource

§ 2.0 Introduction

Fisheries management means maintaining and enhancing the fishery resources and the aquatic environment and establishing controls on the harvest. In this part we will consider fisheries management programs in terms of their objectives, methods of accomplishment, and the activities of various management entities.

§ 2.1 Management Objectives

2.1.0 Introduction

Fisheries management takes into consideration both the resource itself and the objectives and needs of the societies which control and seek to utilize it. The anadromous fishery resource is both perishable and renewable. Thus, while an over-harvest could imperil its renewability, an under-harvest during the limited time it is available would result in an irreplaceable waste of the resource. Fisheries management seeks to avoid both of these adverse results and to maintain the stocks at a level which will permit the optimum yield from one fish cycle to another. But the "optimum yield" of the different types of fisheries must be considered in broader terms than just the quantity of fish product obtained. Because in today's society fish resources serve broader needs of man than nourishment. The commercial, sport, and Indian fisheries are managed for different use objectives and user interests. Accordingly, the objectives of fisheries management vary in accordance with the purposes

and constituency for which the particular fishery is being managed.

Commercial fisheries are managed to achieve a maximum sustained yield in terms of food and economic profit whereas sport fisheries are managed to achieve a maximum sustained recreational experience and a high yield of personal use food and "trophy" product. The Indian tribes have as their primary use objectives the fostering of Indian economic well-being, the preservation of their cultural heritage and way of life, and the provision of a significant element of Indian diet.

2.1.1 Commercial Fisheries Management

Managing the fishery for maximum sustained profit requires, among other things, that the harvest occurs near the time when the available "crop" has attained maximum bulk and quality. These do not necessarily coincide in time and place. Thus the proper time for commercial harvest corresponds most nearly to the relatively brief period of time when the fish are full-grown and returning to or entering their natal stream to spawn. Net fishery seasons permit the efficient taking of mature or nearly mature fish for commercial purposes during this time period only.

2.1.2 Sport Fisheries Management

Managing for maximum sustained recreation requires providing ample opportunities for fishing. Long seasons, economically and geographically accessible waters, and high catches per individual effort all increase recreational yield. Angling is the accepted method of recreational fishing for salmon and steelhead. It involves catching the feeding fish

with baited hooks or lures. Generally, salmon are taken in the marine areas and steelhead in freshwater streams.

Feeding and growing salmon in the ocean and Puget Sound are of greatest recreational value because they are vulnerable to sport gear over a long period. On the spawning migration route from their saltwater feeding areas, full-grown salmon are available to anglers for only a short period of time. Feeding activity of these latter fish diminishes or ceases as they complete their saltwater migration. The efficiency of angling gear is then measurably decreased. In some Puget Sound areas where salmon are in or approaching their natal estuary, the catch rate is commonly one-tenth that of the ocean fishery.

In contrast to salmon, steelhead actively feed throughout their entire spawning migration route and are readily available to sport gear in freshwater areas. They are not generally taken by sport gear in saltwater.

2.1.3 Indian Fisheries Management

Management for Indian objectives is closer to commercial management than to sport inasmuch as pursuit of an economic livelihood and the efficient procurement of a food supply are major purposes. In addition, salmon and steelhead have special significance in the religious, cultural, and mores of the Indian people. Because of traditions, treaty provisions, and location of Indian communities, the Indian fisheries are largely place-oriented. Management for Indian fishery objectives must take this factor into consideration.

§ 2.2 Management Methods

2.2.0 Introduction

Fishery management methods are related to the life history characteristics of the resource discussed in Part I of this report. The life histories of salmon and steelhead are cyclic. The harvest today, particularly with respect to salmon, can occur in a number of locations on their migration and at several phases of their life progression. During a substantial part of this migration and development, fish of different species, races, and river systems are intermingled to both known and unknown extents. These facets of the anadromous salmonid fisheries make the task of management a complex and difficult one--one in which forecasts of constantly changing variables play a key role.

While there are a number of managers and policies governing the management of salmon and steelhead, the methods or techniques employed by each are essentially the same. All managers are faced with a growing demand on the resource coupled with a serious deterioration of the natural habitat.

2.2.1 Assessment of the Freshwater Habitat

In the management of salmon and steelhead, an assessment of the resource must be made. One of the first steps in assessing the existing or potential level of the resource is to evaluate the freshwater habitat condition. A survey of spawning, rearing, and migration habitat, and water quality on each watershed is needed. Examples of information collected on surveys of salmon and steelhead habitat include type of surrounding terrain, type and amount

of stream bank cover, stream gradient, fish migration blocks, stream bottom composition, and pool-riffle profiles. The relative measures of potential spawning and rearing area available in each stream are determined from these surveys. These basic data also are used to evaluate fish or habitat losses that may result from water development projects.

2.2.2 Assessment of Fish Stocks

The run size is determined by adding the total catch to the total escapement; however, this method of measuring run size can only be completed after catch and escapement have been analyzed. Estimations of run size must be made before and during the fishing season to assure an adequate escapement for spawning purposes, and to alert the fishermen to the need to increase or decrease their gear for that season. Several methods of estimating run size are used so that the information may be applied to current regulations. One of these is to relate spawning ground counts--either total or index--and hatchery plants to the subsequent catches and escapement. Run size is also estimated by tagging a representative segment of the population and, .through recovery programs in the ensuing fisheries, determining the tagged-to-untagged ratio. Relating catch-per-unit of effort to past years' data can also provide gross estimates of run size during the fishing season. Measurement of numbers of juveniles in streams and estuaries gives some idea of mortality rates and a gross estimate of size of the returning adult run.

2.2.3 Habitat Protection and Improvement

Habitat protection, rehabilitation, and enhancement are major efforts in the management of

salmon and steelhead. Habitat protection is concerned mainly with the prevention of loss or reduction in production potential in spawning and rearing streams. One of the most important means of habitat protection is setting restrictions on any project that will use, divert, obstruct, or change the natural flow or bed of any river or stream. Habitat rehabilitation involves restoring production potential in streams that have been altered by man or nature. It includes clearing log jams and debris from streams, stabilizing stream banks, and desilting of spawning areas. Providing access to spawning and rearing areas by either laddering or removing natural blocks to migrating fish is an example of habitat enhancement. Protection and restoration of freshwater migration routes and estuarine rearing areas are increasingly important tasks facing fishery managers.

2.2.4 Artificial Propagation

The first Pacific salmon hatchery was established by the Federal Government on the McCloud River (a tributary to the Sacramento River) in 1872. Since that time hatcheries proliferated throughout the coastal states as their effectiveness as a tool in fishery management was recognized by the State and Federal fishery agencies. Hatcheries are not generally considered to be a substitute for natural production except where water development projects have entirely precluded the production from the natural habitat. Instead they are a means of supplementing and rehabilitating natural production.

The greatest success in hatchery operations has been with coho and fall chinook salmon and steelhead. These represent the bulk of the total artificial production. Recent research has led to development of

techniques which indicate that other species may be successfully produced artificially. Hatcheries specifically operated for spring chinook have been increasingly successful. In addition to hatcheries, artificial spawning channels and natural rearing ponds have become important management tools.

2.2.5 Regulating the Harvest

2.2.5.0 Purposes of Regulation

Most fishery harvest regulations rest on two fundamental precepts. The first is that stocks of fish should be protected since they are exhaustible and can be destroyed. The second precept is that as fish grow older they grow larger--up to a certain age--and it is desirable to protect the young and allow them to become older so that the harvest can take advantage of growth.

Under the present complex harvest scheme there are three main purposes of regulation:

1. To preserve the fish stocks--salmon and steelhead are extremely valuable and vulnerable, and regulations are necessary just to maintain a stock;
2. To attain the maximum sustained yield;
3. To provide an orderly fishery--today more people want to fish than are needed to harvest the resource.

To accomplish this all the runs and races that spawn in the multitude of streams of the Puget Sound and coastal area should be recognized and defined. Each stream has one or more of five salmon species plus steelhead, and many rivers have several races of

one species. In order to regulate effectively, it is desirable to have:

1. Accurate catch and escapement statistics on all races;
2. A forecast of run size;
3. Estimates of the number of spawners that can be accommodated in the streams used by each one of the units of stock;
4. Information on the number of units of gear, their efficiency, and the amount of fishing that is needed in order to make the catch.

Limitations on the harvest to assure run survival can be grouped into two major categories--those designed to protect selected portions of a stock of fish and those designed to limit the size of the take.

2.2.5.1 Protecting Selected Portions of Fish Stocks

Included in the broad category of protecting selected portions of a stock are four approaches: (1) net restrictions; (2) closed areas; (3) closed seasons; and (4) size and weight limits.

1. Net restrictions. Examples of restrictions on nets in the salmon fishery include mesh size, either maximum or minimum, of purse seines, gill nets, and reef nets.
2. Closed areas. Selected areas are closed to fishing for a number of different reasons, only a few of which pertain to protecting selected portions of a stock. The usual selective closure in the salmon fishery is to assure protection to a weak run in a vulnerable position, such as a milling or holding area, migration obstructions, areas of concentrated passage, or the spawning

ground. Closed areas are relatively easy to administer and, as a result, are popular with those who must enforce the regulations. Salmon preserves are examples of areas closed to commercial fisheries to protect mature salmon in vulnerable positions near their home streams. Generally, sport fishing, being less efficient, is not excluded from such areas.

3. Closed seasons. Limitations in fishing time may be particularly effective in adjusting the fishing pressure on selected portions of a stock. These may take the form of long-term closures in which fishing is not permitted on a specific stock, or short-term closures which adjust the number of days fished during a week. In the former, e.g., summer chinook of Skagit River origin are protected from commercial harvest by a closed season in Skagit Bay during time of passage in this location. This may be followed by a commercial fishery for fall chinook which may be limited to 2 or 3 days per week in the same area. Closed time can be ineffective or harmful if applied without sufficient knowledge of the stocks of fish. Incorrectly used, it may permit overfishing of some stocks and underfishing of others.

4. Size and weight limits. Size and weight limits on salmon and steelhead are applied to the commercial troll fishery and to the sport fishery to protect the immature fish. Size limits are also applied to the gill net, reef net, and purse seine fisheries in conjunction with mesh size regulations.

2.2.5.2 Methods of Limiting Size of Catch

Three methods of limiting the total catch are: (1) by catch quota; (2) by limitation of number of fishing units; and (3) by limiting the efficiency of gear.

1. Limitation by quota. Limitation by quota is used only in a very few special situations in salmon management. The quota system is only used when there is a fairly sophisticated knowledge of the size of the run and the proportion that should be taken. The quota system is sometimes used in salmon fisheries management when a run of fish is to be divided between different groups of fishermen. Bag and possession limits are examples of quotas.

2. Limitation of number of fishing units. The limitation of total units of commercial fishing gear through limiting the number of persons who may participate has not been a popular method of regulation in North America. The chief argument in favor of limited entry is that it will allow the application of improved fishing methods which result in greater efficiency and lower cost. License limitation has not yet been accepted by the legislature. Limitation of number of units of gear that an individual may use is a common regulation.

3. Limitation of efficiency of gear. One of the most common regulatory techniques is to limit the efficiency of the gear. This is done in a number of different ways. Almost all of the methods described earlier to protect certain portions of the stock can be used to limit efficiency (or reduce efficiency as a side effect). In addition,

efficiency can be reduced by limiting the type of gear, the amount of net, the type of material, or the size of the boat.

2.2.5.3 Regulations to Decrease Gear Efficiency

Regulations aimed at decreasing gear efficiency almost automatically restrict technological developments. State laws in Washington, for example, prohibit the use of monofilament nylon nets, electronic fish finders, or airplanes for spotting, although all are of demonstrable help in increasing the efficiency of salmon fishermen. Restriction of gear efficiency has social implications. The pressure for reduction of gear efficiency evolves sometimes from conflict between owners of different kinds of gear as to who should be allowed to fish. Often the result is that the most efficient gear is banned. Fixed gear is usually the first to go under this kind of social legislation. Examples of this in the history of the Northwest are the elimination of fish wheels and traps on the Columbia River and traps in Puget Sound and Alaska.

Much of the difficulty in controlling the harvest results from the fact that, until the fish has actually been legally caught, the individual fisherman has no property rights and it is not under his control. The root of the problem is that an individual fisherman has no incentive to maximize the yield from given stocks of fish. If he does not catch them, someone else does, so he cannot save them for the future. Although the need for management and the methods used depend on biological analyses, the actual techniques, like the ultimate objectives, involve political and economical considerations.

E3000 Pond Smolt Production
AT-004-13

Tribal Reservations within
the U.S. v WA Case Area
Legend
Tribal Reservation
Major Streams
Water Resource Inventory Areas
Washington State
AT-008-7

Attachment A: Washington Department Of Fish And Wildlife Illustration Entitled Pacific Salmon Lifecycle

Attachment D: Photograph Of A Culvert On A Tributary To The Nooksack River (Bates No. 02-002315)

Attachment E: Photograph Of A Culvert Showing Elimination Of Rearing Habitat With In *[sic]* A Culvert (Bates No. 02-002366)

Attachment G: Photograph Of Culvert At Red Cabin Creek Filled With Sediment Prior To Dredging (Bates No. 02-002180)

Attachment J: Photograph Or *[sic]* Culvert At Red Cabin Creek After Dredging (Bates No. 02-002281)

Attachment K: Photograph Of Culvert At Red Cabin Creek Showing Dead Adult Salmon (Bates No. 02-002194)

Attachment L: Photograph Of Culvert At Red Cabin Creek Showing Dead Adult And Juvenile Salmon (Bates No. 02-002204)

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120 Year Sustained Benefit Cost Analysis
WSDOT Fish Passage Program
Four Options
Sekulich 5/29/01

Background

1. References
WDFW Habitat Program SHEAR Section: WSDOT Fish Passage Inventory, Fish Barrier Conditions and Project Evaluation, April 2001 – 51 pp.

WDFW 1995 Economic Statistical Report – 30 pp.

WDFW Washington State Spent Catch Report 1995 – 41 pp.

2. Barriers
[illegible] barriers left to correct (mostly) changes with [illegible] and corrections

1997-2000: 10 barriers corrected (21 dedicated projects, 25 "legalizing" projects)

1991-2000: $104 K per correction with an assumption that future projects will average $250 K in 2001 dollars

1991-2000: For 30 dedicated correction projects that have a Priority factor (PI) and a [illegible] length spread, an average of 5,345 [illegible] were opened, resulting in a [illegible] of 3,202 adult equivalent (AE) [illegible] and [illegible] per project on an annual basis. This translates to 0.5 AE [illegible] per [illegible]

3. Future Corrections Options – assuming all barriers will be corrected
Option 1: The correction rate that was existing when the WSDOT WDFW passage program was solidified in the 91-3 biennium – 7.1 corrections/yr for 120 years

Option 2: The correction rate resulting from the average number of corrections in 1997-2000 – 11.9 corrections/yr for 70 years

Option 3: The 20-year correction plan – 42.8 corrections/yr for 40 years

Option 4: The 10-year correction plan – 75.5 corrections/yr for 10 years

Potential Harvest and Values

Retail Values per AF

Species	1995 Commercial Value ($/AF)	2001 Commercial Value (Nominal $/AF) (5% annual inflation)	2001 Recreational Value (Nominal $/AF) (Minimum estimate)
Chinook	28.72	36	36
Chum	8.38	11	11
Pink	1.57	2	2
Coho	17.61	23	23
Sockeye	19.84	25	25
Steelhead	22.15	28	28
Others (including resident subwoods)		16 (average)	16 (average)

"Potential" Harvest Rates (1995 = 2001 and later)

Species	Commercial			Recreational		
	Commercial (000)	Adjusted Commercial fig WA stocks (000)	Harvest Rate (Assuming 10% overall for wastewater & 20% for resident)	Recreational (000)	Adjusted Recreational fig WA stocks (000)	Harvest Rate (Assuming 10% overall for wastewater & 20% for resident)
Chinook	763	107	10%	100	100	20%
Chum	766	96	10%	16	16	3%
Pink	2583	140 (Assuming 10% [illegible] commercial)	40%	116	137 (Assuming 10% [illegible])	10%
Coho	462	462	11%	177	177	11%
Sockeye	415	93 (Assuming 10% [illegible] commercial)	40%	[illegible]	20 (Assuming 10% [illegible])	2%
Steelhead	77	10 (Assuming [illegible])	21%	18	18	18%
Others (small, mostly resident)		Nominal [illegible]	1			20% (average for [illegible])

Other Assumptions and Information

1. Benefits are considered conservative because ecosystem values not included (e.g. spawners), wetland-related values not included (e.g., non-consumptive use, tribal ceremonial), open values and commercial values, spin-off values not included (e.g. benefits to other industries if stocks not listed under ESA). This is partially tempered recognizing that future projects will open less habitat than their already corrected.

2. Costs are considered liberal because tagging efficiencies were not considered.

3. Annual harvest benefit = $12,315 commercial + $7,100 recreational + $19,500 species, see attached table for All production and benefits per correction.

4. Social discount rate set at 3.

5. Annual inspection and maintenance cost to keep corrected capture penalties = (% of correction costs) x ($2.5 k per year).

Option Analysis

Option 1
Benefit = 656 harvest (60-year mean correction) ($19,500) = $1,861,520,000 (today's dollars)
Cost = 656 harvest [($250,000) + 100-year mean correction ($2,500)] = $141,400,000 (today's dollars)
B/C = 2.41

Option 2
Benefit = 656 harvest (57-year mean correction + 46 years) ($19,500) = $1,185,436,000 (today's dollars)
Cost = 656 harvest [($100,000) + 117-year mean correction + 46 years ($2,500)] = $101,820,000 (today's dollars)
B/C = 1.84

Option 3
Benefit = 656 harvest (10-year mean correction + 106 years) ($19,500) = $1,836,120,000 (today's dollars)
Cost = 656 harvest [($250,000) + 110-year mean correction + 77-years ($2,500)] = $449,400,000 (today's dollars)
B/C = 4.09

Option 4
Benefit = 656 harvest (8-year mean correction + 106 years) ($19,500) = $1,809,704,000 (today's dollars)
Cost = 656 harvest [($250,000) + 98-year mean correction + 106 years ($2,500)] = $453,680,000 (today's dollars)
B/C = 4.12

Memorandum of Agreement
Between
Washington State Department of Fish and Wildlife and Washington State Department of Transportation
Concerning
Construction of Hydraulic Plan [illegible]
Chapter [illegible] and Chapter [illegible]
June [illegible]

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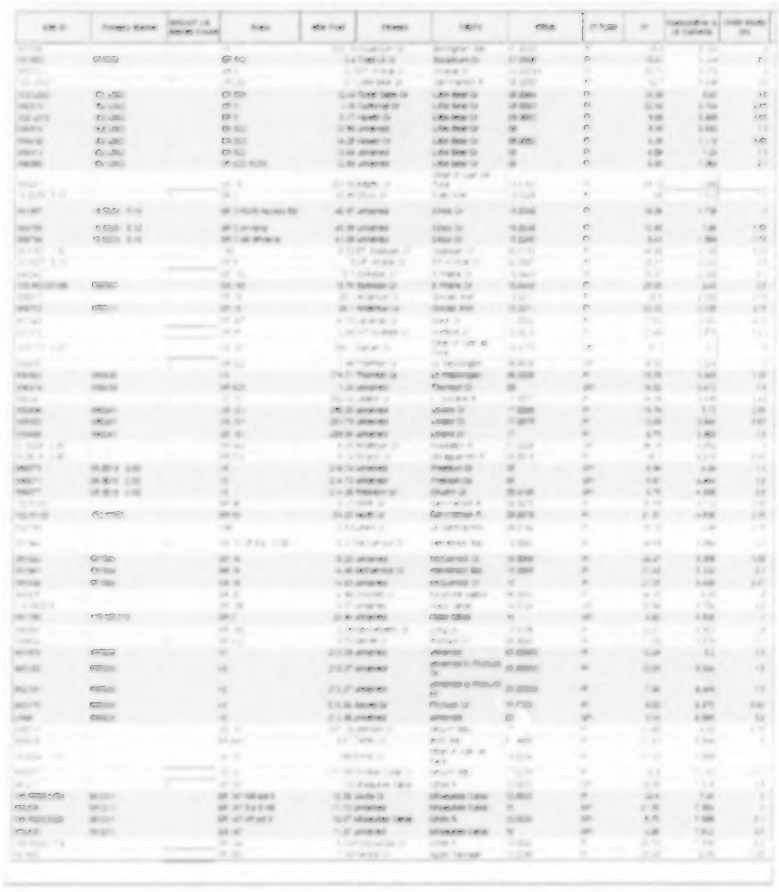
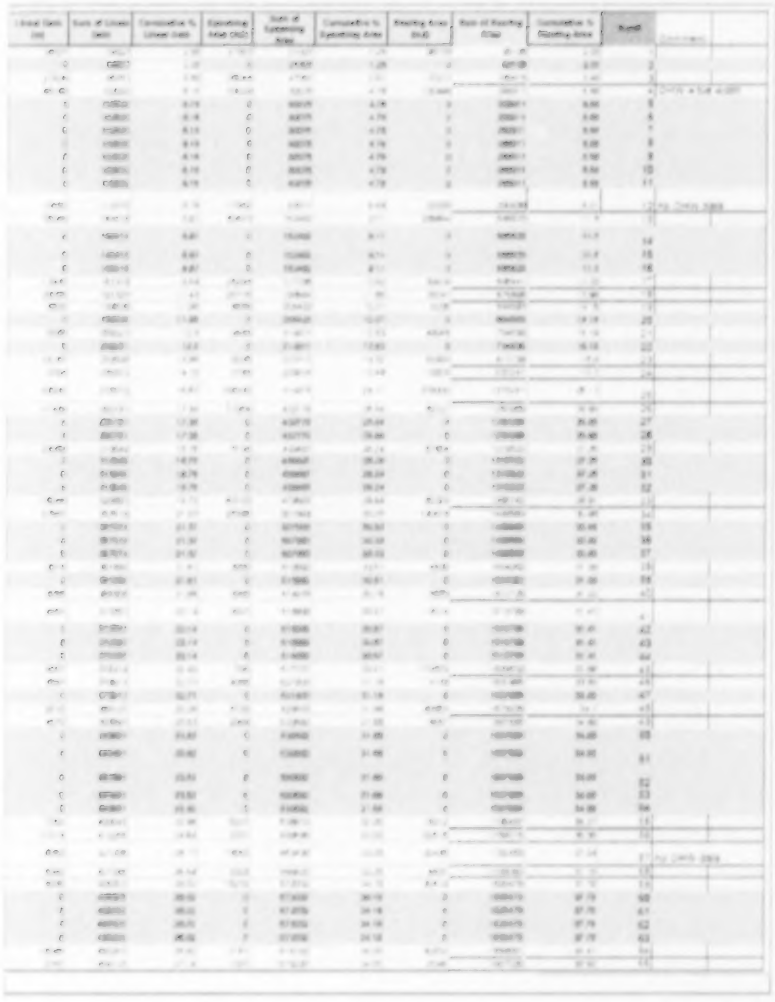
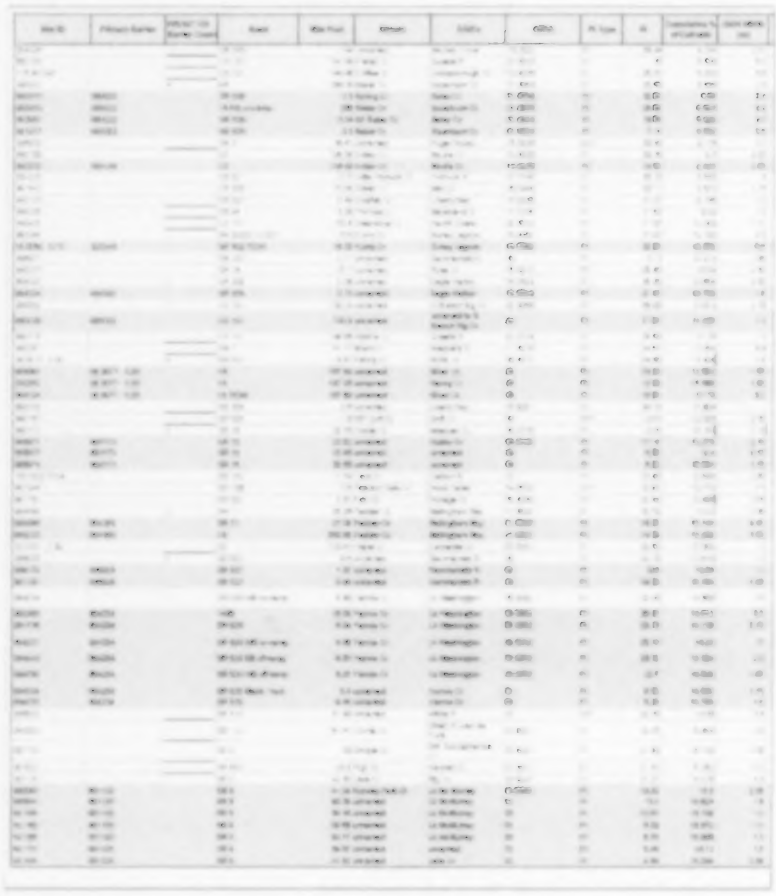
Appendix C: Fish Passage

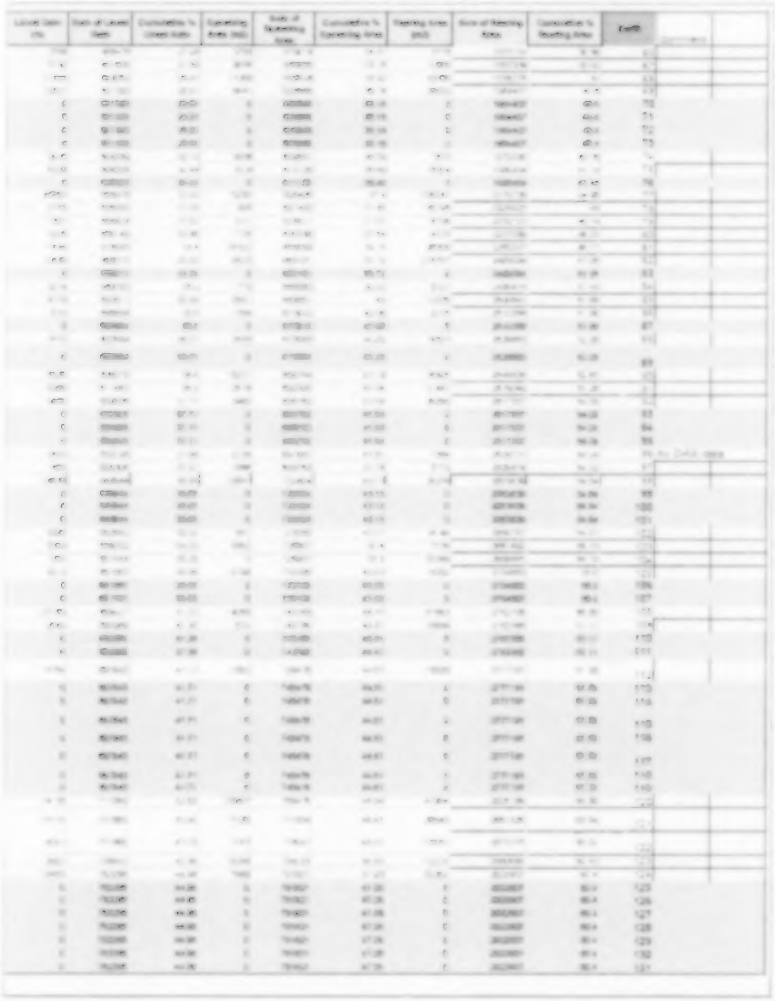
Table 1c. Ownership of Downstream Barriers Associated with Base Culverts

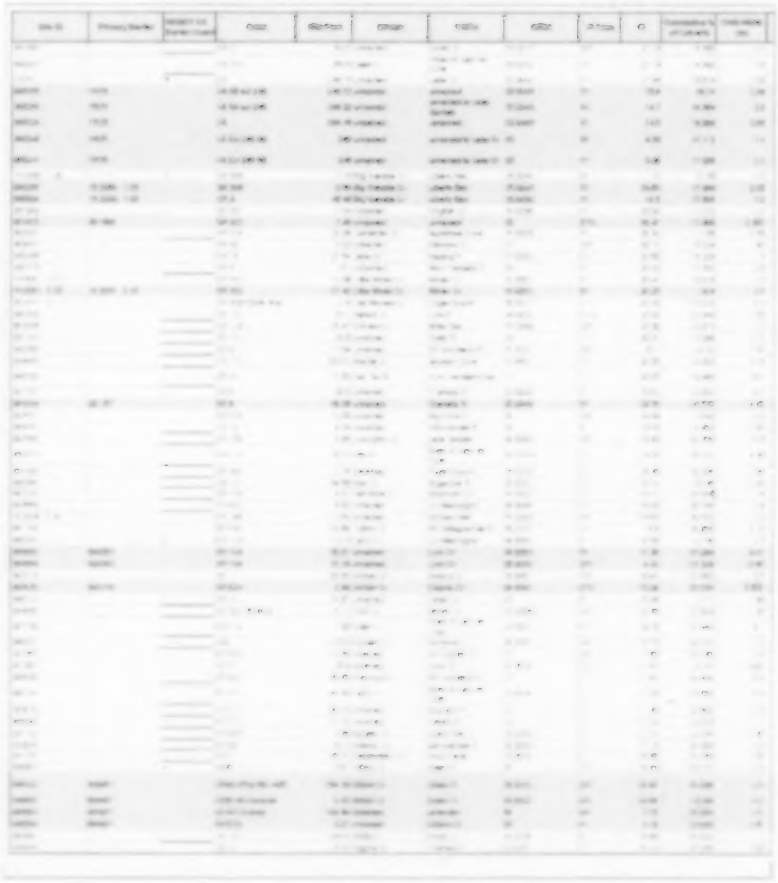
	Partial Barrier	*Total Barrier*	*Unknown Barrier*	*All Barriers*
State Owned Downstream Barriers	13 (9 culverts/4 dams)	11 (10 dams/ 1 misc barrier)	0	24
Non-State Owned Downstream Barriers on Forestland to be repaired by 2018	2 (culverts)	2 (culverts)	2 (culverts)	6
Non-State Owned Downstream Barriers not on Forestland	137 (107 culverts/13 dams/3 misc. barrier)	52 (40 culverts/6 dams/6 misc. barriers)	1(culvert)	190



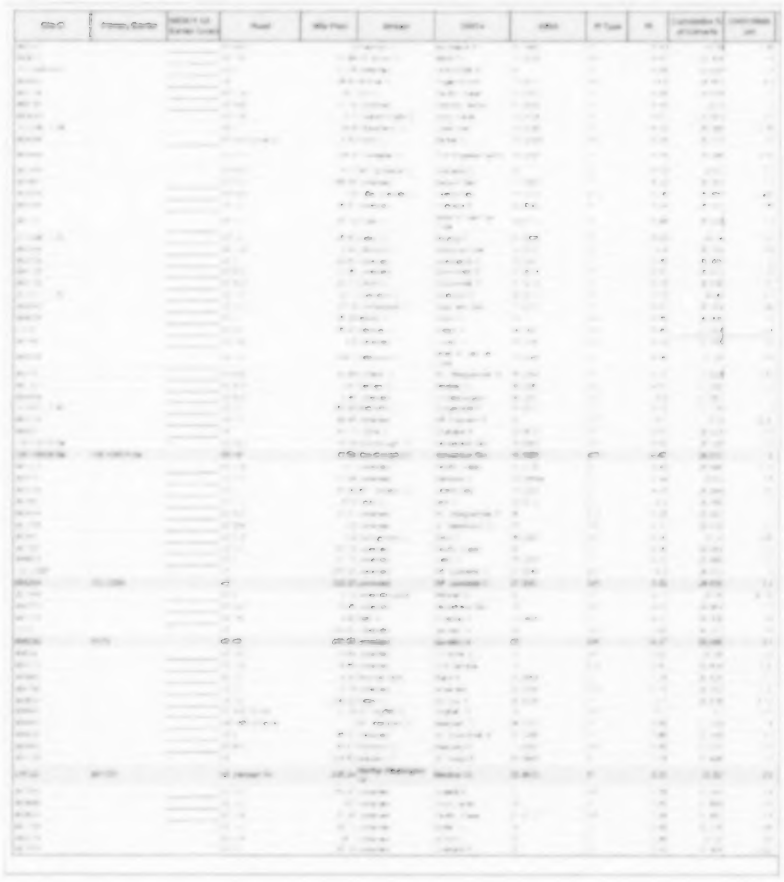


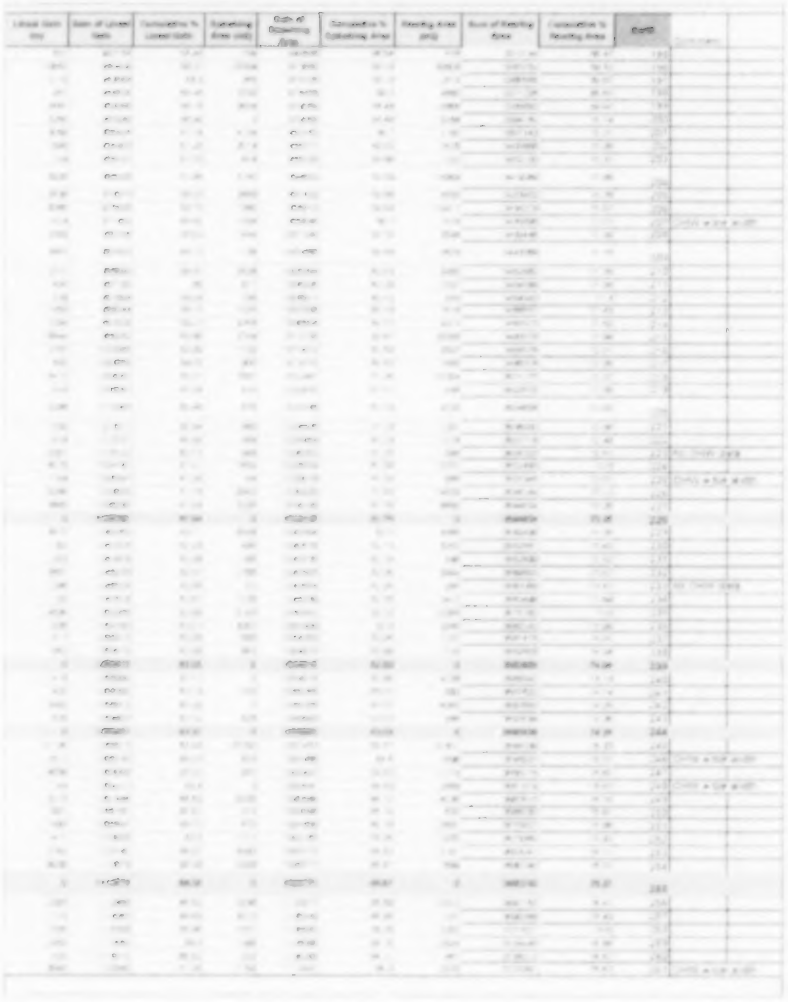


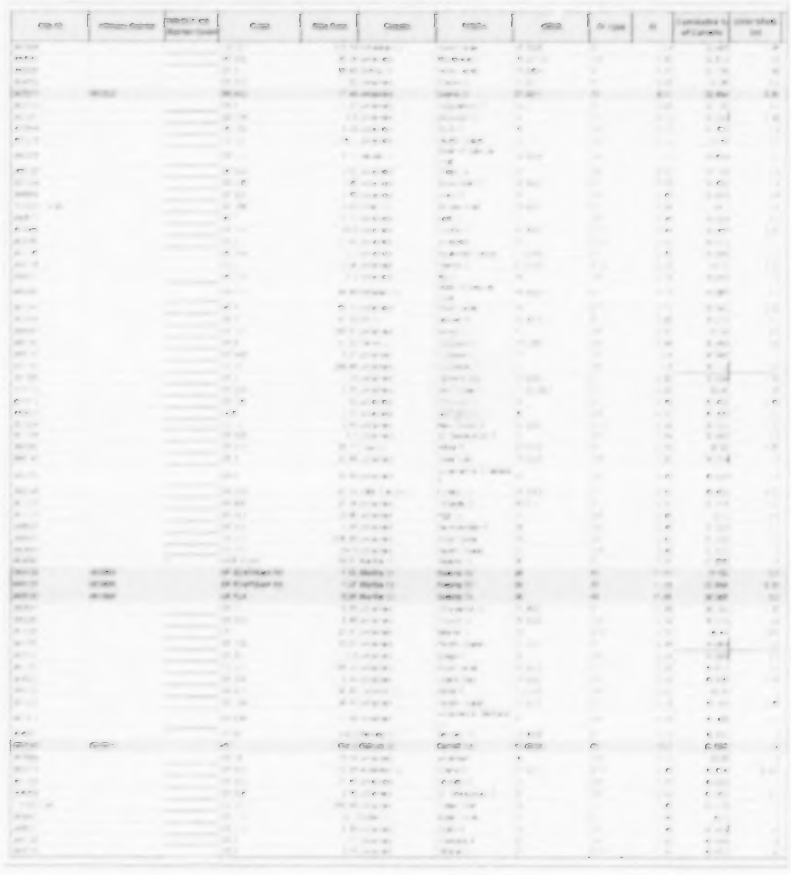


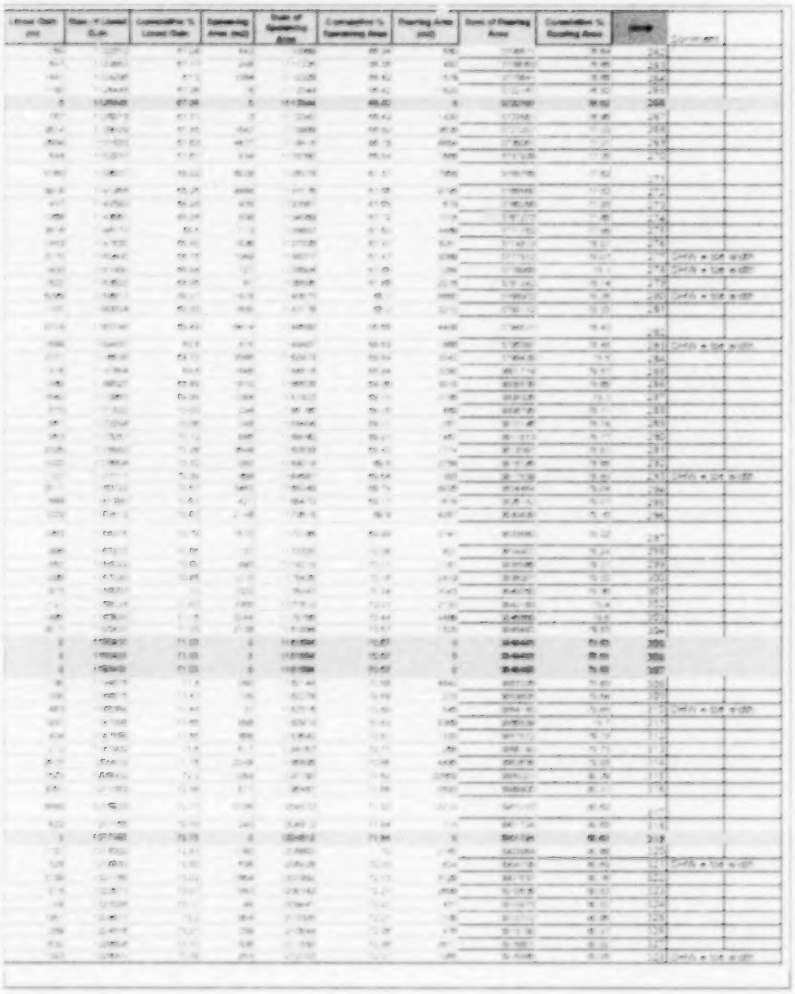


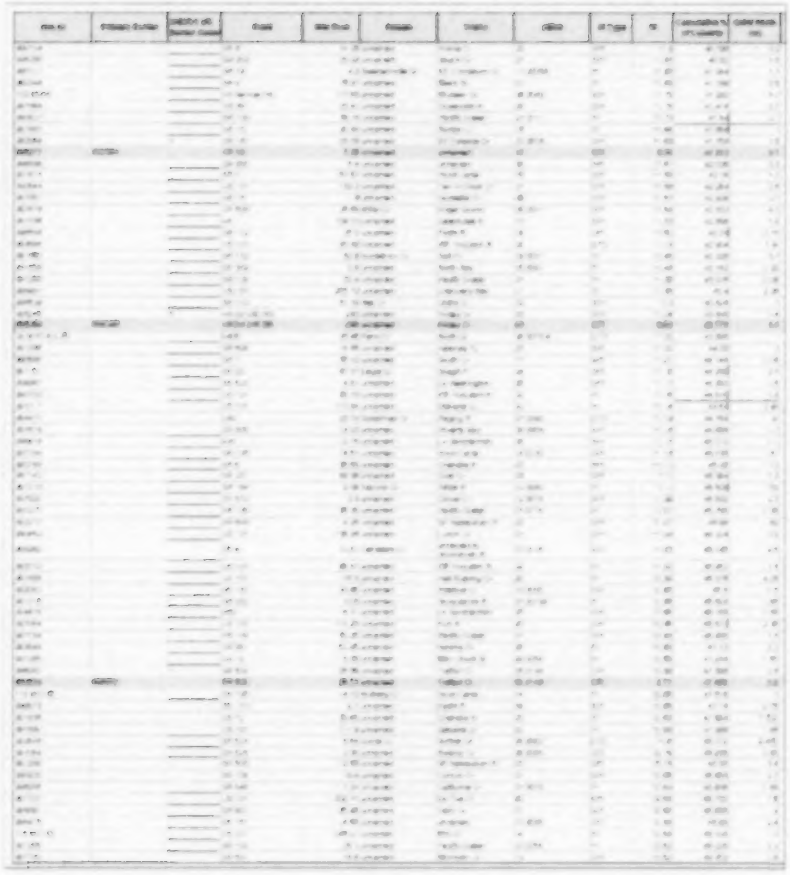
Literal Sum (m)	Sum of Literal Sum	Cumulative % Literal Sum	Expanding Area (m2)	Sum of Expanding Area	Cumulative % Expanding Area	Reading Area (m2)	Sum of Reading Area	Cumulative % Reading Area	Rank		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

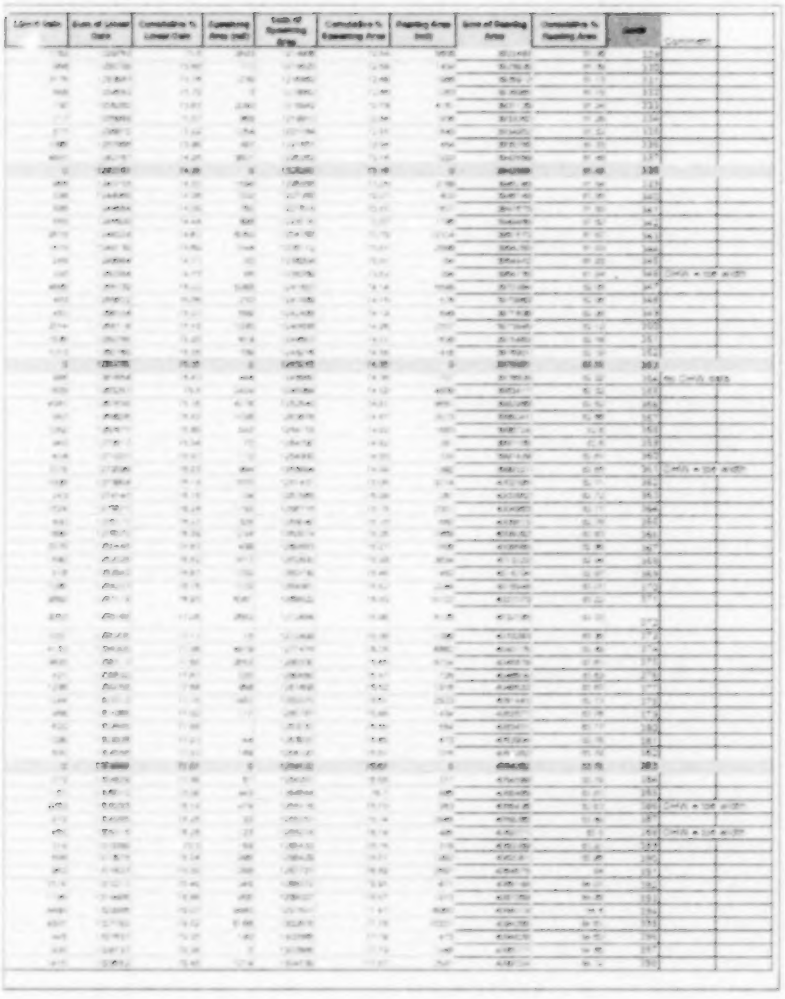


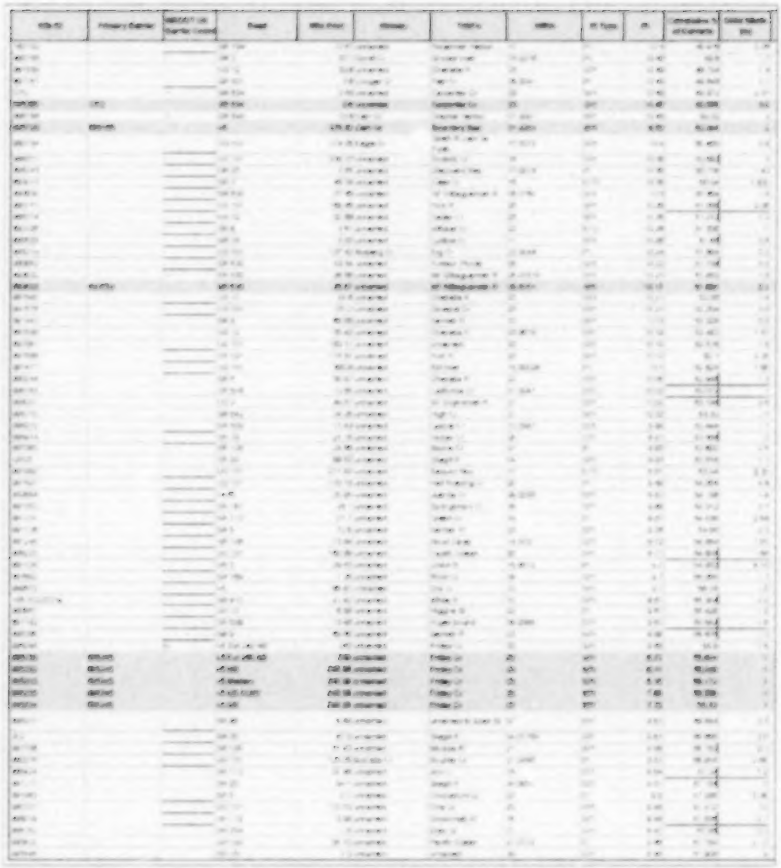












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Site ID	Primary Barrier	Affiliation Department Domain Count	Road	Min Yield	Stream	Metric	Mill A	Pr Type	Pr	Commodity Unit Carbon	Other Earth Dec
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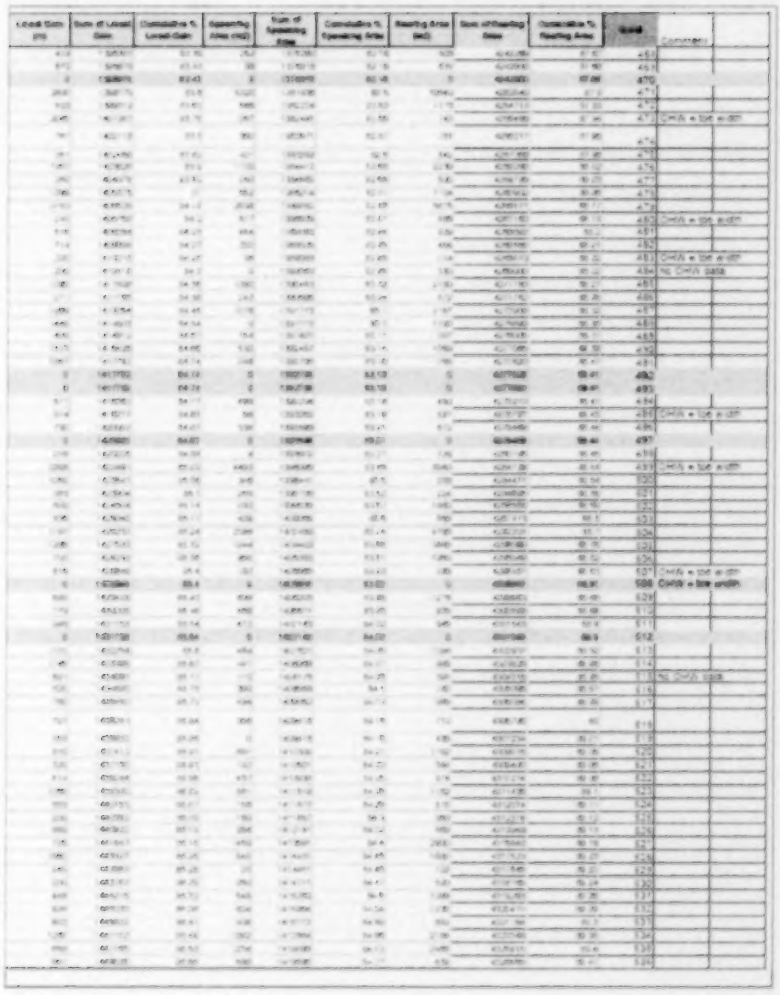

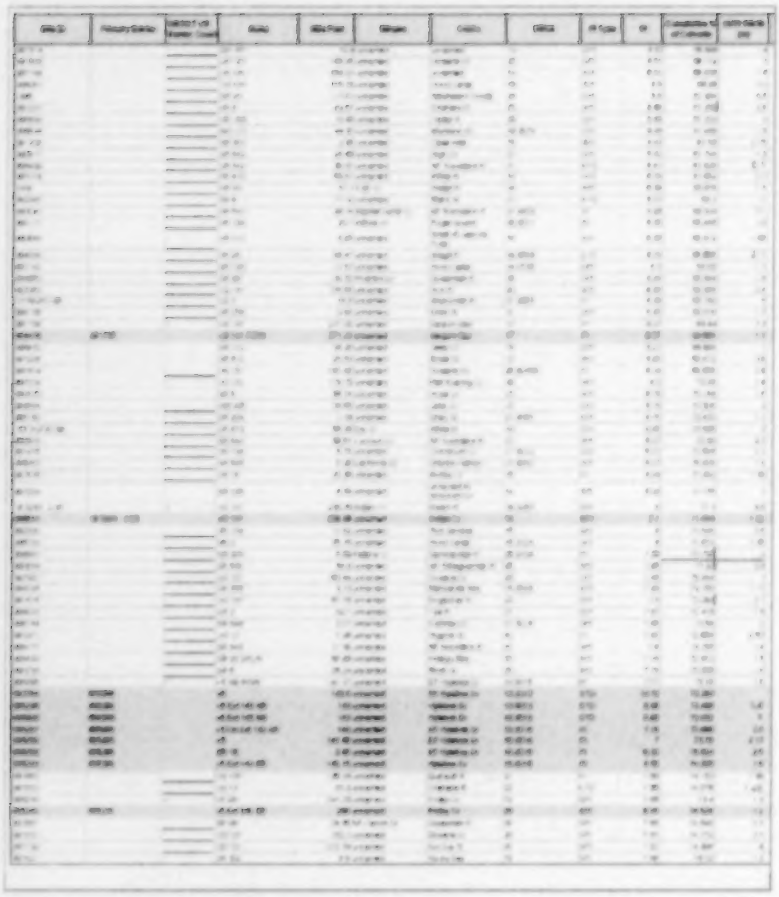

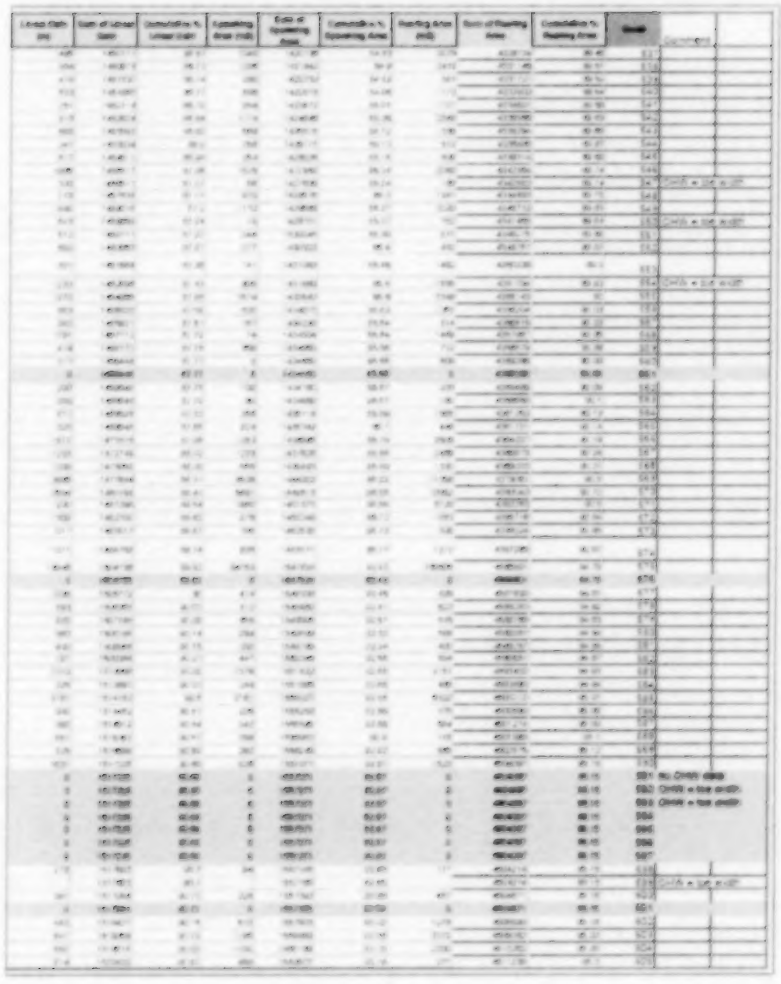

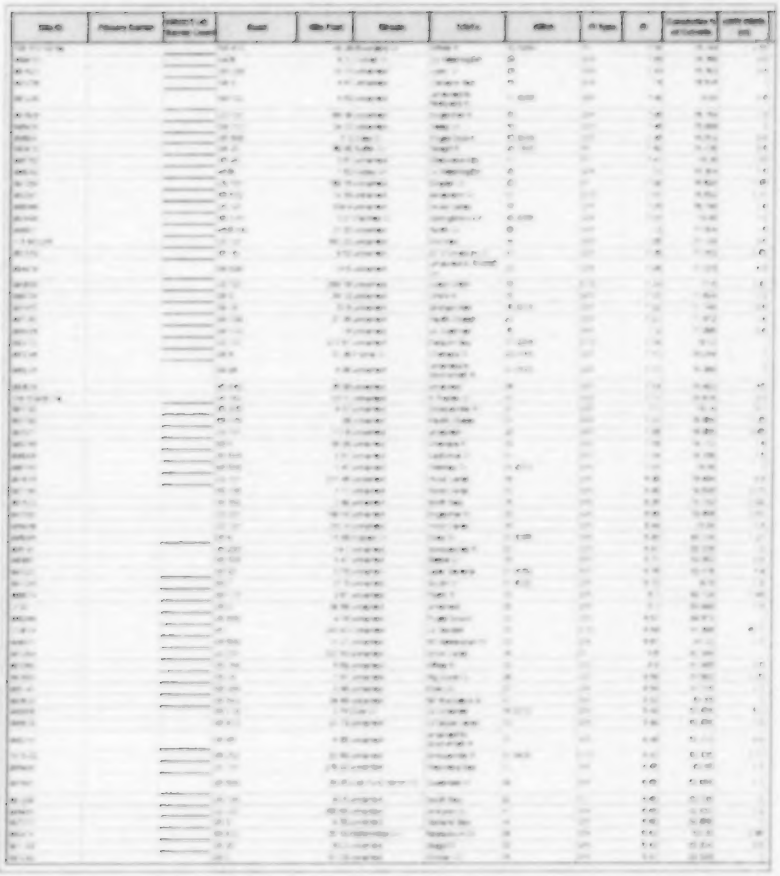

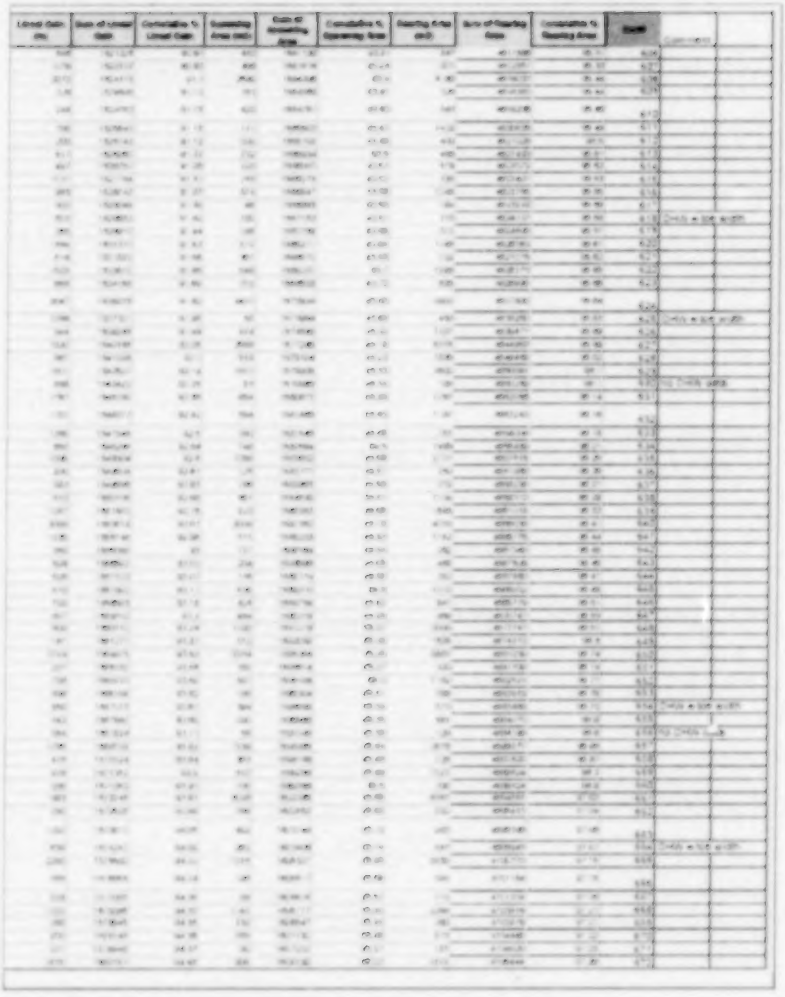

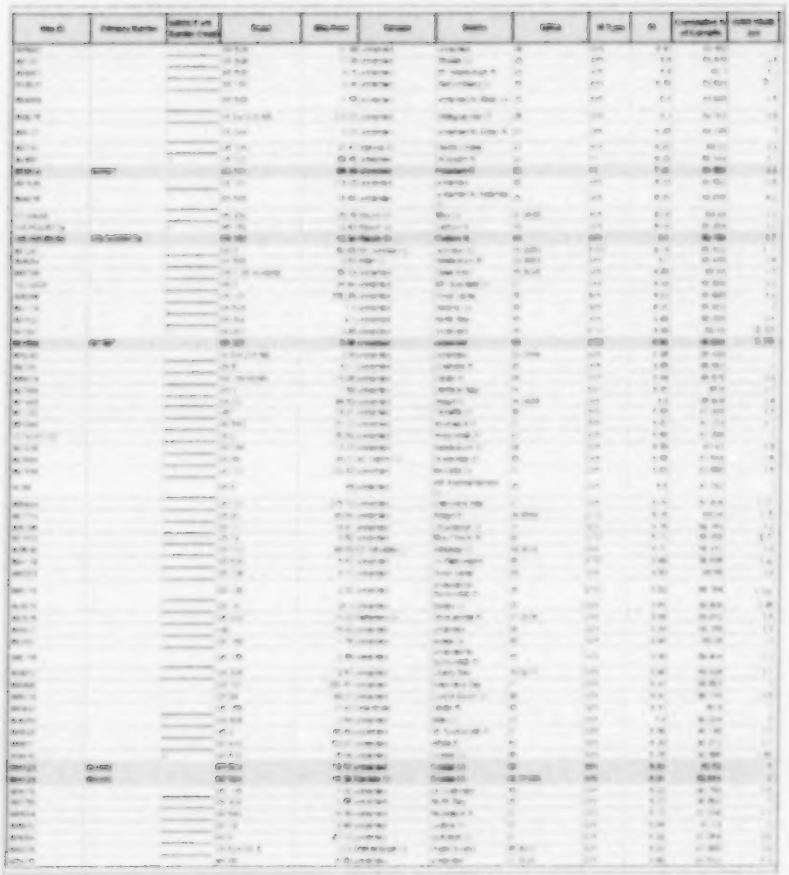

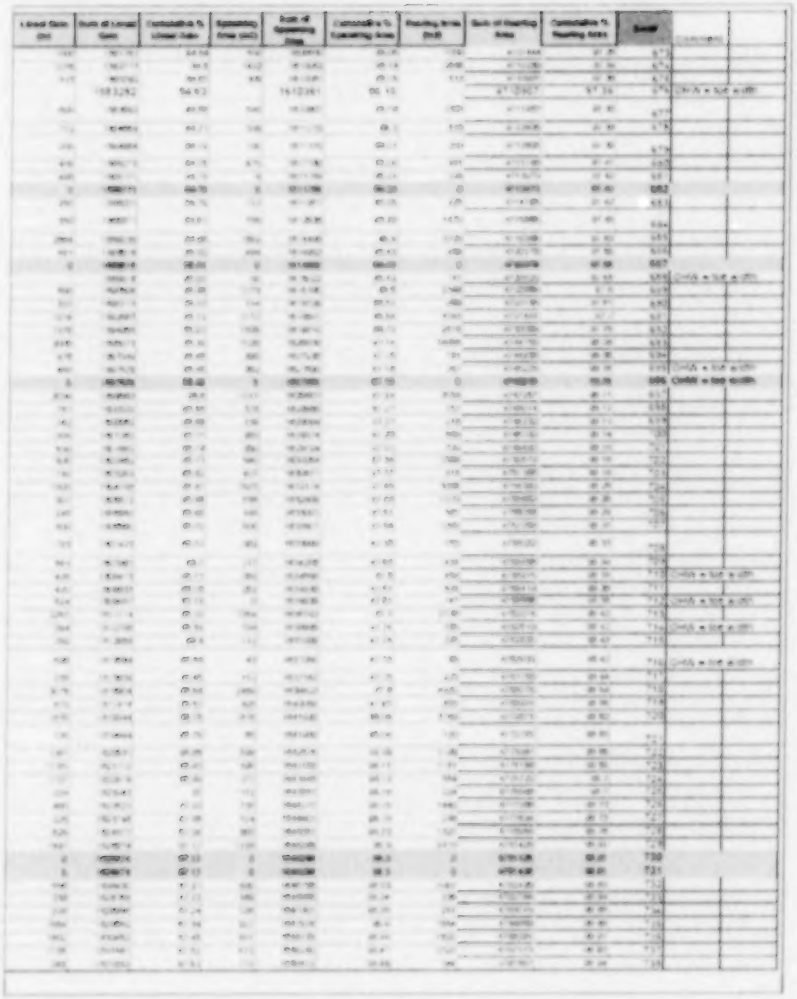

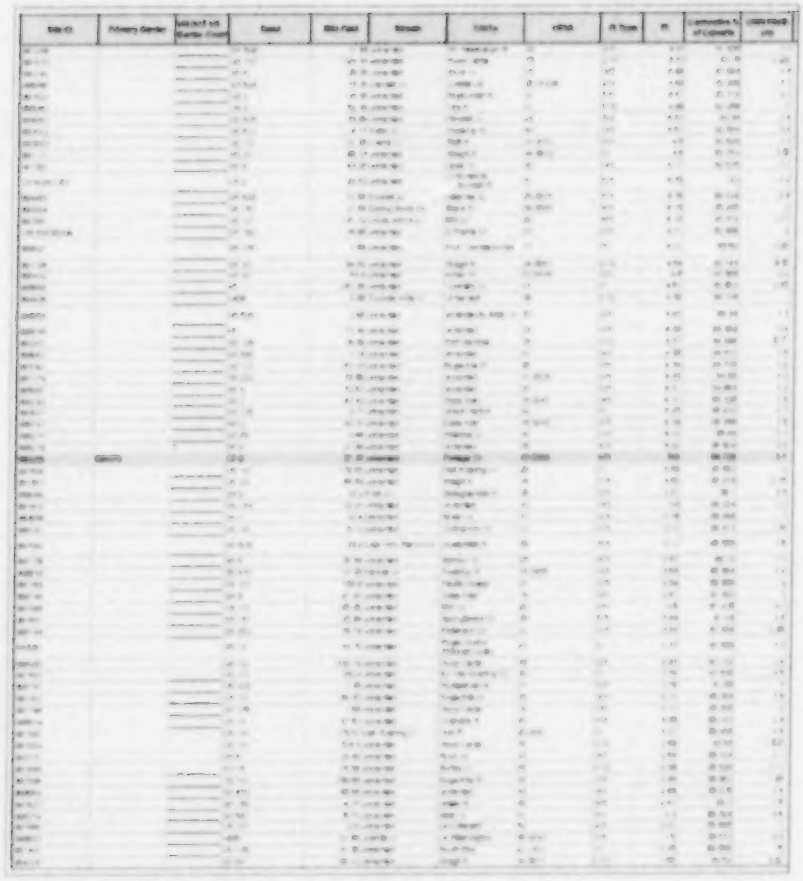

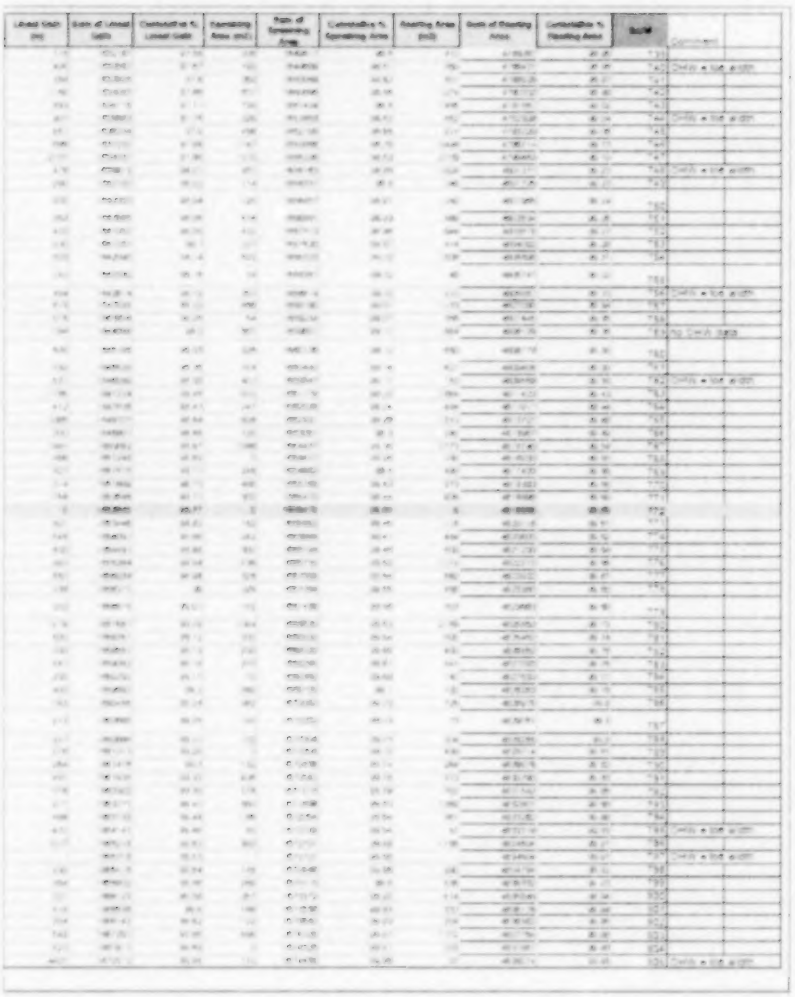

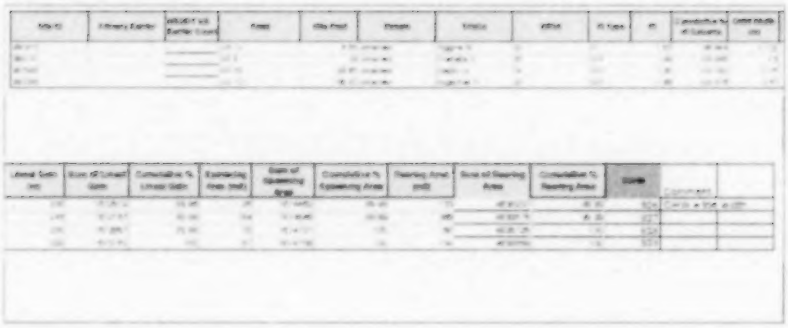

No. 17-269

In The
Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.

Respondents.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

JOINT APPENDIX – VOLUME III OF III

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PETITION FOR CERTIORARI FILED AUGUST 17, 2017
CERTIORARI GRANTED JANUARY 12, 2018

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THE HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF WESTERN WASHINGTON AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, vs. STATE OF WASHINGTON, et al., Defendants.	Case No.: 70-9213 Subproceeding No. 01-1 (Culverts) ***REVISED* DECLARATION (Oct. 13, 2009) OF PHILLIP A. MEYER REGARDING PRE-FILED, WRITTEN DIRECT TESTIMONY**

I, Philip A. Meyer, hereby declare as follows:

1. I am over the age of eighteen and am competent to testify on the matters set forth herein.

2. I hold a B.A. degree in Economics and Political Science from the University of British Columbia, and an M.A. in Resource Economics from the University of California, Santa Barbara. I have been employed as an economist for more than forty years, specializing in natural resource and particularly fisheries economics. I have previously been qualified as an expert witness and testified in several matters including the Shellfish Subproceeding in *United States v.*

Washington, Civil No. 9213, Sub. 89-3. A true copy of my *curriculum vitae* is attached to this declaration.

3. I was asked by counsel for Plaintiff Tribes in this sub-proceeding to testify as a witness son behalf of the Tribes. My direct testimony is in the form of a written report entitled "Estimation of Economic Benefits from Added Salmon and Steelhead Production in the State of Washington. A true and complete copy of my report is incorporated herein and constitutes testimony I would give in open court.

4. Attached and incorporated by reference herein is my revised report dated October 13, 2009, in lieu of direct testimony which report contains testimony I would give under oath if offered in open court.

I DECLARE under penalty of perjury that the foregoing is true and correct.

Executed this 13th day of October, 2009, at Victoria, Canada

By: _____
Philip A. Meyer

Estimated Marginal Net Economic Benefits Associated with Salmon and Steelhead in the State of Washington

A Report to:

MORISSET, SCHLOSSER & JOZWIAK

A Report by:

Philip A. Meyer

October 13, 2009

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Marginal Net Economic Benefits Associated with Salmon and Steelhead in the State of Washington

I. Introduction.

A 2008 report released by the Washington Department of Fish and Wildlife in December attributes $9.5 million annually in ex-vessel payments to Washington non-tribal commercial salmon fishermen[1], and net economic values of $129.4 million annually to recreational salmon fishers and $51.3 million to persons fishing recreationally for steelhead[2] in waters of Washington State.

[redacted]

REDACTED 10-15-2009 TRIAL TRANSCRIPT AT p. 97 (BEAN)

Tribal values associated with returning salmon extend well beyond dollar returns to commercial fishing[6].

This report presents estimates of marginal[7] net economic benefits associated with salmon and steelhead stocks in the State of Washington only. The *marginal unit* utilized here for analysis is *one adult salmon or steelhead*. Extant an estimate of expected salmon returns to obtain an indication of scale, *existence/passive use* benefits are not incorporated in following sections of this report. Information on benefits to tribes – beyond those that would accrue from commercial fishing – is also not presented here.

---

[1] TWC Economics, 2008. **Economic Analysis of the Non-Treaty Commercial and Recreational Fisheries in Washington State. A Report for Washington Department of Fish and Wildlife**, p. 7.

[2] [redacted]

SEE DOCK (BEAN)

[6] See, for example: **Central Washington University, 1991. Potential Effects of OCS Oil and Gas Exploration and Development on Pacific Northwest Indian Tribes: Final Technical Report**. A Report to the U.S. Minerals Management Service. MMS 91-0056.

[7] In economics, "at the margin" means at the point where the last unit is added to or subtracted from production, or consumption.

II. Net Economic Revenue to Tribal and Non-Tribal Commercial Fishermen and Processors from Increased Returns of Salmon and Steelhead.

Assessment of *net economic value* associated with commercial salmon/steelhead harvesting and processing is the appropriate measure of economic impact from a national economic perspective.[8] *Net economic value* from increased commercial harvest and processing of salmon refers to the added money revenue gained by these activities, minus any additional associated costs.

Employment of otherwise unemployed labor resources is to be treated as a net economic benefit, not a cost[9], in such assessment. In applied terms, this requirement instructs that costs associated with labor, taken from a labor pool that is otherwise substantially and persistently unemployed, should not be deducted from net economic value[10].

This report follows federal guidelines, and calculates the net economic value for a commercially harvested salmon, based on procedure used in National Marine Fisheries Service et al. (2004).[11] The following steps are employed.

a. Estimate average price per salmon received by commercial fishermen.

b. Subtract any relevant associated fishermen cost to obtain net economic value at the fishermen level.

c. Apply a net value markup from the price received by fishermen to incorporate salmon processing in the calculation.

Prices per salmon in this analysis are obtained from the tribal component of the joint Washington State/ NWIFC commercial catch statistics data base – and represent averages for 2007/2008[12].

At the U.S. Decennial Census (2000), unemployment rates for case tribes were relatively high – ranging from 7 percent to 23 percent[13]. Overall, unemployment rates reported for Washington State residents were lower – but unemployment for the fishing sector was estimated above 20 percent in coastal counties[14].

---

[8] U.S. Water Resources Council, 1983. **Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies**. Washington, D.C., U.S. Superintendent of Documents.

[9] **Supra** at 93.

[10] National Marine Fisheries Service, Puget Sound Tribes and Washington Department of Fish and Wildlife, 2004. **Puget Sound Chinook Harvest Resource Management Plan: Final Environmental Impact Statement**. Appendix D, Attachment C, p. 1

[11] **Supra**.

[12] Prices obtained by non-tribal commercial fishers may vary somewhat from those obtained by tribal fishers, according to gear employed and variant spot marion conditions.

[13] U.S. Bureau of the Census, 2004. **Characteristics of Individuals in a Specified American Indian Tribe – 2000**. STF-14. Census 2000 special tabulation.

[14] Wegge, Tom. 2003. *Estimated Unemployment Rates for Fishing Industry*. Cited to Washington State Employment Security Department, 2002, 2003. Email at August 29, 2003.

Washington State Employment Security Department identified the overall state unemployment rate increasing to 6.5 percent in 2008.[15] Present economic circumstances indicate that unemployment in the state (inclusive of the more adverse tribal and non-tribal fishing sectors) has increased further.[16]

Finally, NMFS et al (2004) employed a 100 percent markup for salmon from landed (ex-vessel) value through processing – and a reduction of 50% of this increment to allow for associated processing costs.[17]

Considering this information, it is concluded that the percentages applied to gross fishing revenue to obtain estimated *net economic value* by National Marine Fisheries, Tribes and the State of Washington in 2004[18] retain validity. These percentages will be used here (Table 1)[19] – expressed as a portion of the total value amount at respective fishing and processing stages.

Table 1

Net Economic Value Coefficients for Commercial Fisheries and Processing - Added Harvest of Salmon and Steelhead –

Measure	Net Economic Coefficient*	Economic Value (baseline = $1.00)
Gross Revenue Return to Fishing		1.00
Net Economic Return to Fishing	Gross fishing revenue x .94	.94
Net Economic Return to Processing	Gross fishing revenue x .50	.50
Net Economic Return to Fishing & Processing	Gross fishing revenue x 1.44	1.44

*The *net economic coefficient* represents the proportion of each dollar received by a fisher or processor that is counted as *net economic value* under the procedures discussed in this report. *Net economic values* at fishing and processing stages are additive.

Table 2 provides estimates of the net economic value per salmon accruing annually to Washington commercial fisheries and processors from additional harvest of salmon and steelhead. These values are obtained by applying average 2007/2008 prices for tribal

---

[15] Washington State Employment Security Department, 2008. **2008 Washington State Labor Market and Economic Report**. p. 3.

[16] Washington State Employment Security Department, 2009. **Workforce Explorer: Washington**. January. Downloaded March 9.

[17] National Marine Fisheries Service et al. 2004. Supra. Appendix D, Attach. C, p. 8.

[18] Supra.

[19] The net economic coefficient for non-tribal commercial fishers has been increased slightly (by .04%) in this report, to conform to the tribal coefficient. This adjustment is consistent with final figures used by National Marine Fisheries Service et al. 2004.

inside and outside harvests – and modifying these results by the net economic value coefficients (Table 1).

Net economic values associated with further markup of salmon and steelhead revenues to retails levels are not included in this report. Such further value increments can be substantial.[20]

Table 2

Net Economic Value to Washington Commercial Fishers and Fish Processors from Return of One Additional Salmon or Steelhead

Species	Harvest Price Per Salmon	Net Economic Value Per Salmon – Fishing & Processing -
Chinook	$53.30	$76.75
Chum	6.50	9.36
Coho	14.90	21.46
Pink	.96	1.38
Sockeye	11.40	16.42
Steelhead	21.23	30.57

III. Net Economic Value Associated with Additional Sport Catch of a Salmon.

For several decades[21], estimates of *consumer's surplus* have been widely used to determine net economic value associated with goods and services.

> (Consumer's surplus) is a measure of the benefit to a consumer, net of the sacrifice he has to make, from being able to buy a commodity at a particular price. It is widely used in cost-benefit analysis and other areas of applied economics as an appropriate measure of changes in welfare... .[22]

The US Water Resources Council (1983) recommended that, where direct market prices for recreational goods and services were unavailable, *consumer's surplus* could be determined by two applied methods. The *travel cost* method counts the number of visitors to a given recreational site as a function of cost associated with distance and travel time. The second basic pricing method is via *contingent valuation survey*, which directly asks

---

[20] See, National Marine Fisheries Service, 2009. **Fisheries of the United States 2006**. Silver Spring, MD. U.S. Department of Commerce, pp. 38, 40.

[21] See, for example; Willig, Robert D., 1976. *Consumer's Surplus Without Apology*. in, **The American Economic Review**. September, pp.589-597.

[22] Pearce, David W., 1992. **The MIT Dictionary of Modern Economics** (4th edition). Cambridge, Mass: The MIT Press. p. 78.

respondents how much they would be *willing to pay* for changes in the quantity or quality of resources or of recreational opportunities[32, 34]

Where available researcher time and/or financial resources does not justify a field study to determine *consumer's surplus* via *travel cost* or *contingent valuation survey*, the Water Resources Council certified a third procedure – initially called the *unit day value method*, based on examination of prior empirical work and best expert judgment.[33] Such transfer of values from prior work continues to the present day – and is now commonly termed *benefit transfer analysis* by economists.

> Generally, nonmarket values are estimated through original research using methods such as the contingent valuation method or the travel cost method. The increasingly rich literature of valuation studies, combined with theoretical innovations, created the opportunity for less expensive and less time-consuming approaches to value estimation—a variety of techniques that can be described as benefit transfer.[35]

Given the time and financial resources available to this report, *benefit transfer analysis* is employed here. Two previous analyses are considered: National Marine Fisheries Service, Puget Sound Tribes and Washington Department of Fish and Wildlife (2004); and TCW Economics (2008)[37]. These two studies meet requisite "goodness of fit" criteria for transfer of value results – namely, they were done by recognized experts, and for federal/state agencies with fishery management responsibility in the waters of Washington State. Their reported results also provide data specific to salmonids.

National Marine Fisheries Service et al. (2004) estimated the *average net economic value of sport fishing in Puget Sound waters (including tributaries)* at $65 per angler day[38], expressed in Year-2000 dollars – based on earlier survey data from Olson et al., (1991)[39]. TCW Economics (2008) estimated a 2006 net economic value for sport fishing for salmon in Washington State of $58 per angler day[30] - based on a survey of prior salmon sport fishing studies in the Pacific region by Boyle et al. (1998)[31]. The lower TCW estimate of $58 per angler day is more recently published. It will be employed here.

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[32] US Water Resources Council, 1983. Supra at 67-83.

[34] For a more extensive treatment of scholarly discussion of *contingent value survey* methods, see: Mitchell, Robert C., and R.T. Carson, 1989. Using Surveys to Value Public Goods: The Contingent Value Method. Washington, D.C: Resources for the Future. The Johns Hopkins University Press.

[33] US Water Resources Council, 1983. Supra at §3-87.

[35] Allen, Byron P. and J.B. Loomis. *The decision to use benefit transfer or conduct original valuation research for benefit-cost and policy analysis*. in, Contemporary Economic Policy. 01-Jan-08.

[37] TCW Economics, 2008. Supra. p. 19.

[38] National Marine Fisheries Service et al., 2004. Supra at D-49.

[39] Olson, D., J. Richards and R.D. Scott, 1991. *Existence and Sport Values for Doubling the Size of Columbia Basin Salmon and Steelhead Runs*. Rivers. Vol. 1, No. 1, pp. 44-56.

[30] TCW Economics, 2008. Supra at 19.

[31] Boyle, Kevin, R. Bishop, J. Caudill, J. Charbonneau, D. Larson, M. Markowski, R. Unsworth, and R. Paterson, 1998. A Data Base of Sport Fishing Values. U.S. Fish and Wildlife Service. Economic Division.

Dividing aggregate "net economic value" figures for salmon and steelhead, reported in TCW Economics' Table 8, by recreational salmon and steelhead harvest figures from TCW's Table 6, yields an estimate of net economic value *per sport salmon* harvested (Table 3).

Table 3

Net Economic Value from an Added Sport Caught Salmonid

Species	Net Economic Value Per Fish
	—dollars per fish—
Salmon	$460.15
Steelhead	$470.73

IV. Present Value from an Additional Salmon or Steelhead Returning to Washington State – Summed Over 50 and 100 Years.

The average annual net economic benefit from an additional adult salmonid returning to Washington State is expected to accrue, year after year, over future time. Standard practice requires economists to sum such annual benefits over a future period of up to 100 years[12]. For this analysis, such summed values are reported for periods of 50 and 100 years into the future.

Economists note that benefits accruing in the future may not be assigned equivalent value with those accruing at present – either because persons may prefer to consume goods or services "now" rather than "later" (social time preference), or because presently available funds could be invested to earn a future economic return (rate of return on capital). Consequently, economists progressively reduce weightings applied to annual estimated net economic value over each future year by use of a real rate of discount[13] - and then sum these discounted annual values to obtain an estimate of the *total present value* of benefits received.

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[12] US Water Resources Council, 1983. Supra at 5.

[13] *Real discount rates* discount the value of benefits received in future years, minus any effects from expected future inflation.

Issues associated with selection of an appropriate discount rate have been extensively discussed in Lind, et al. (1982)[34]; and by Hartman (1990)[35], Lind (1990)[36], Lyon (1990)[37] and Moore and Viscusi (1990)[38]. Charles Howe, chair of the special JREAM (1990) session on discounting[39] summarized consensus from the four papers.

> Under current U.S. conditions, a real rate (of discount) of about 2% seems to have support...[40]

In analyses such as this, where benefits are expected to accrue well into the future:

> The government's long term borrowing rate is a good first candidate for the discount rate in long-term intergenerational allocation problems.[41]

The U.S. Office of Management and Budget, in their circular of December, 2008, recommend use of a real discount rate of 2.7% for future annual benefits lasting thirty years or more.[42]. That rate is employed here to estimate the discounted present value of benefits accruing to fishers, fish processors and to Washington State residents in general, from an added returning salmon and steelheads – summed over 50 years and 100 years, respectively (Table 4).

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[34] Lind, Robert C., K.J. Arrow, G.B. Corey, P. Dasgupta, A.K. Sen, T. Stauffer, J.E. Stiglitz, J.A. Stockfish and R. Wilson, 1982. **Discounting for Time and Risk in Energy Policy**. Resources for the Future. Washington, D.C.: John Hopkins Press.

[35] Hartman, Robert W., 1990. *One Thousand Points of Light Seeking a Number: A Case Study of CBO's Search for a Discount Rate Policy*, in, **Journal of Environmental Economics and Management**, 18, S-3 to S-7.

[36] Lind, Robert C. 1990. *Reassessing the Government's Discount Rate Policy in Light of New Theory and Data in a World Economy with a High Degree of Capital Mobility*, in, **Journal of Environmental Economics and Management**, 18, S-8 to S-28.

[37] Lyon, Randolph M., 1990. *Federal Discount Rate Policy, the Shadow Price of Capital, and Challenges for Reforms*, in, **Journal of Environmental Economics and Management**, 18, S-29 to S-50.

[38] Moore, Michael J. and W.K. Viscusi, 1990. *Discounting Environmental Health Risks: New Evidence and Policy Implications*, in, **Journal of Environmental Economics and Management**. 18, S-51 to S-62.

[39] Notes 44 through 47.

[40] Howe, Charles C., 1990. *Introduction: The Social Discount Rate*, in, **Journal of Environmental Economics and Management**, 18, S-2.

[41] Lind, Robert C., 1990. Supra at S-24.

[42] Executive Office of the President, 2008. **2009 Discount Rates for OMB Circular No. A-94**. Office of Management and Budget. December 12.

Table 4

Present Value of Salmon-Related Benefits from an Additional Salmon or Steelhead Returning to Washington State Each Year - Summed Over 50 and 100 Years at a Real Discount Rate of 2.7% -

Beneficiary	Annual Net Benefit Per Fish	Total - 50 Years	Total - 100 Years
	--$--	--$---	--$---
Commercial Fishers & Processors:			
: Chinook	53.30	1,492	1,886
: Chum	6.50	182	230
: Coho	14.90	417	517
: Pink	.96	27	34
: Sockeye	11.40	319	403
: Steelhead	21.23	594	751
Sport Fishers:			
: Salmon	460.15	12,883	16,284
: Steelhead	470.73	13,180	16,658

V. **References.**

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Executive Office of the President, 2008. **2009 Discount Rates for OMB Circular No. A-94**. Washington, D.C: Office of Management and Budget. December 12.

Hartman, Robert W., 1990. *One Thousand Points of Light Seeking a Number: A Case Study of CBO's Search for a Discount Rate Policy*, in, **Journal of Environmental Economics and Management**, 18, S-3 to S-7.

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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF WESTERN WASHINGTON AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiffs, vs. STATE OF WASHINGTON, et al., Defendants.	Case No.: 70-9213 Subproceeding No. 01-1 (Culverts) ***REVISED* DECLARATION (Oct. 13, 2009) OF KIT RAWSON IN LIEU OF DIRECT TESTIMONY** 28 U.S.C. § 1746

I, KIT RAWSON, hereby declare as follows:

1. I am the senior fishery management biologist for the Tulalip Tribes and have been a harvest management biologist for the Tulalip Tribes since 1986 and make this declaration in that capacity.

2. I have a Bachelor of Science degree in biological sciences from the University of Arizona (1975) and a Master of Science degree in biomathematics from the University of Washington (1980).

3. Prior to my employment with Tulalip I was a fisheries biometrician with the Alaska Department of Fish and Game for five years. I was a member of the Pacific Fishery Management Council's Scientific and Statistical Committee from 1991-1998. I was a member of the Puget Sound Technical Recovery Team from 2000 to 2007 and now am on the successor Puget Sound Recovery Implementation Technical Team. I am a Certified Fisheries Scientist with the American Fisheries Society.

4. I have been previously qualified as an expert witness and have testified on a number of occasions in *United States v. Washington*, both through live testimony and through affidavits and declarations.

5. Attached and incorporated by reference herein is my revised report dated October 13, 2009, in lieu of direct testimony which report contains testimony I would give under oath if offered in open court.

I DECLARE under penalty of perjury that the foregoing is true and correct.

Executed this 13th day of October, 2009, at The Tulalip Reservation, Washington.

By: Kit Rawson
Kit Rawson

UNITED STATES V. WASHINGTON - CAUSE NO. 9213 - SUBPROCEEDING 01-1
(CULVERT CASE)

WRITTEN REPORT AND DIRECT TESTIMONY OF KIT RAWSON
APRIL 3, 2009 TO ACCOMPANY DECLARATION OF APRIL 3, 2009
REVISED OCTOBER 13, 2009

1. Current status of Pacific salmon in the Puget Sound region

The rivers entering the greater Puget Sound region, including Puget Sound proper, Admiralty Inlet, the Whidbey Basin, and the United States side of southern Georgia Strait, the San Juan Islands, the Strait of Juan de Fuca supports six species of the genus *Oncorhynchus*, five species of Pacific salmon, plus steelhead. (Table 1).

Table 1. Species of Pacific salmon and steelhead (*Oncorhynchus* spp.) in Puget Sound with summaries of status under the Endangered Species Act (ESA) and the Salmon and Steelhead Stock Inventory (SASSI).

		ESA Status		SASSI Status			
Common name	**Scientific name**	**Number of ESUs[a]**	**Number endangered, threatened, or of concern[a]**	**Number of stocks[b]**	**Number of stocks rated[b,c]**	**Number of stocks rated as depressed or critical status[b]**	**(%)[d]**
Chinook salmon	*O. tshawytscha*	1	1	29	22	12	(55%)
Chum salmon	*O. keta*	2	1	55	42	3	(7%)
Coho salmon	*O. kisutch*	1	1	46	37	17	(46%)
Pink salmon	*O. gorbuscha*	2	0	15	13	4	(31%)
Sockeye salmon	*O. nerka*	1	0	4	4	4	(100%)
Steelhead trout	*O. mykiss*	1	1	60	31	15	(48%)
Overall		8	4	209	149	55	(37%)

[a] This counts ESUs with spawning grounds wholly or partially within the greater Puget Sound region. See http://www.nwr.noaa.gov/ESA-Salmon-Listings/.

[b] See http://wdfw.wa.gov/fish/sasi/sasi97.pdf

[c] Unrated stocks were classified as "unknown" status due to lack of sufficient information to make the assessment.

[d] Percent of rated SASSI stocks that were in depressed or critical status.

I will discuss the current status of these species as related to what we can say about how their current status compares with their condition in a time before major impacts to habitat from converting land from forest to farms and cities, modification of shorelines, introduction of pollutants, modification of streamflow patterns, and blockages of access to habitat from dams and culverts.

A broad overview of salmon status is provided in the comprehensive review undertaken by the National Oceanic and Atmospheric Administration, Fisheries Division (NOAA Fisheries) in the late 1990s, for carrying out their mandates under the Endangered Species Act (ESA). They classified the Pacific salmon in Puget Sound into 8 evolutionarily significant units (ESU) [1], of which 4, or 50% are listed as endangered or threatened, or classified as "of concern" (Table 1)[2].

A more detailed assessment of Puget Sound salmon status is in the comanagers' (State of Washington and the treaty tribes) review of the status of all Washington salmon and steelhead in 1993. This analysis, in which I participated, resulted in a report called the Salmon and Steelhead Stock Inventory (SASSI[3]). The first step used available information on geographic location of spawning aggregations, average fish size, age structure, migration timing, and genetics to divide the species into stocks, or separate breeding populations. Pacific salmon biologists consider the stock to be the appropriate unit for conservation and for evaluating the status of a species. Those of us working on SASSI identified 209 stocks this way for all six species in the Puget Sound region (Table 1).

Our next step was to examine available information on trends in abundance and productivity to classify each of the stocks as "healthy", "depressed", or "critical." We classified a number of the stocks, lacking reliable abundance trend information, as "unknown" status. We assigned depressed status to stocks that are producing below levels that would normally be expected and critical status to stocks that are so low in abundance as to be biologically impaired by that fact alone. Although this isn't exactly the same thing, it is similar to an assessment that a group of fish may by threatened with or in danger of extinction. Of 149 Pacific salmon stocks in Puget Sound whose status we rated, 55, or 37% were either depressed or critical; of 22 rated Chinook salmon stocks, 55% were in these categories; of 37 rated coho salmon stocks, 46% were in these categories; and of 31 rated steelhead trout stocks, 48% were in these categories (Table 1).

Chinook, coho, and steelhead, the three species that most depend on a long period of rearing in freshwater streams and rivers[4], have the highest fraction of depressed and critical stocks in the SASSI analysis, with 49% of 90 rated stocks being either depressed or critical. Chum, pink, and sockeye, on the other hand, which do not require significant stream and

[1] The ESU is, for Pacific salmon, the equivalent of a "species" under the ESA and is the basic unit that is classified as endangered, threatened, or of concern.
[2] Of 52 ESUs on the entire west coast from Washington to California, 27 are now listed as threatened or endangered.
[3] http://wdfw.wa.gov/fish/sassi/sassi92.pdf
[4] C. Groot and G. Margolis (eds.). 1991. Pacific salmon life histories. University of British Columbia Press, Vancouver.

river rearing habitat[5] have 59 rated stocks in the Puget Sound region, of which we only rated 19% as depressed or critical.

By definition, and as will become clearer in the discussion of harvest management below, the SASSI depressed and critical stocks, and the ESA listed ESUs, are not able to provide direct fishery benefits from natural production at any level, or only at levels much less than what they likely provided under more pristine conditions of habitat. SASSI critical stocks and ESA-listed ESUs, in particular, must be managed with a primary goal of preventing further impairment or extinction. Although a combination of actions in the areas of harvest management, hatchery production, habitat protection, and habitat restoration is necessary for full recovery of salmon stocks, harvest management actions are typically the first and sometimes the only actions undertaken for conservation of depressed and critical stocks. But harvest reductions alone are not sufficient to increase salmon production, as recent experience shows. Lost habitat must be restored, and currently productive habitat protected, if these harvest reductions are to result in improved salmon production.

In SASSI, we classified the remaining rated stocks as healthy, but this classification is associated in the report with a strong caveat that "healthy" does not imply that these stocks are performing at levels similar to what they likely did under conditions of pristine habitat. In fact the report states "...if a stock status were rated against pristine habitat, every stock could be rated depressed or worse."[6] In fact, salmon biologists consider most naturally produced Chinook stocks in Puget Sound, whatever their SASSI rating, to be at abundances of between 10% and 25% of historical, pre-development, levels. This assessment is based on modeling of the relationship of habitat condition to Chinook salmon production for stocks throughout Puget Sound using the Ecosystem Diagnosis and Treatment (EDT) model[7]. There is no similar comprehensive analysis available comparing current status with pre-development status for other Pacific salmon species throughout Puget Sound. However, it is likely that natural production coho and steelhead stocks, at least, are currently at abundances well below historic levels, no matter what their SASSI status is.

It should also be noted that the majority of returning adult Chinook, coho, and steelhead in Puget Sound today are artificially produced at hatcheries, mainly to provide some fishing opportunity in the face of declining natural production. Although fishery managers undertake extensive monitoring and research to distinguish hatchery production from natural production, some fraction of the salmon identified as natural production are in fact derived from hatcheries and wouldn't be there if the hatcheries weren't producing fish. Thus, it is likely that the assessments of the current status of these species err on the

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[5] Sockeye salmon require lake rearing habitat but do not normally require significant stream rearing habitat. However, there are some sockeye in Puget Sound rivers that are not apparently associated with lakes. See Groot and Margolis 1991

[6] SASSI, p. 28

[7] The use of the EDT analysis to estimate historic production and recovery goals, and to compare these with current production for Puget Sound Chinook salmon, is documented in a report from the Puget Sound Technical Recovery Team: Rawson, K., K. P. Currens, R. Fuerstenberg, W. H. Graeber, M. H. Rockhoust, N. J. Sands, J. B. Scott. *In prep.* Combining demographic and habitat-based approaches to triangulate on viability criteria for Puget Sound Chinook salmon populations, December 16, 2004

optimistic side, and, the actual condition of natural production is worse than these assessments suggest. Also, the SASSI analysis was based on conditions more than 16 years ago in 1992. If state and tribal biologists repeated the SASSI classifications today, the statistics, at least for Chinook, coho, and steelhead, would likely indicate a more degraded resource.

2. Causes of the decline in status

Scientists and planners working on salmon recovery usually group the human-caused factors causing natural production salmon stocks to be in a degraded state into three areas: harvest, hatcheries, and habitat[8]. Other factors, such as ocean conditions, also affect the status of salmon stocks. I will address each of these in turn and then discuss how, in combination, they result in the current degraded status we see for many stocks.

Harvest

The state's and tribes' current approach to salmon harvest management is covered in detail in a later section. In general, harvest controls are implemented to assure that sufficient fish pass through to spawning areas so that the runs will continue to survive at a high enough level to provide future harvest. Appropriate harvest numbers or rates[9] for natural production fish depend on the abundance of the return in a given year and the expected productivity[10] of the fish allowed to spawn.

Salmon management biologists usually predict both abundance and productivity using statistical relationships necessarily developed from data collected for some number of years extending into the past. Error in forecasts is introduced due to the intrinsic variability of salmon populations and variability caused by not taking into account all of the factors that affect abundance and productivity. Besides variability, a bias, or a tendency to forecast too high or too low, can occur if the basic production regime has changed since the time the data underlying the statistical relationships underlying the forecasts were collected. This situation could occur if the amount or quality of habitat has changed, and is especially prevalent for the analyses underlying the harvest management guidelines (minimum escapement numbers or maximum harvest rates) because those analyses are usually only completed infrequently and thus are based on older data.

In addition to errors and uncertainty in forecasting abundance and productivity, there are errors in actually implementing a harvest management plan, i.e. harvesting a particular number or fraction of fish from a particular stock. These errors are mainly caused by uncertainty of stock origin in a particular fishery (most salmon fisheries harvest a mixture of several to many stocks) and uncertainty in the prediction of the number of fish that will be harvested (or otherwise killed such as by being caught and released) in response to a particular fishing regulation.

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[8] Sometimes these are called "the 4 H's" with hydroelectric facilities added as fourth area. For Puget Sound work, however, the effects of hydroelectric dams are usually considered as part of "habitat".
[9] i.e. the fraction of the population that may be harvested
[10] i.e. number of fish in a future generation produced per spawning adult in the generation

Despite the opportunity for errors at many points, salmon harvest management has generally been successful in the Case Area for at least the past couple of decades. Managers track many fisheries closely as they occur, use information from the fishery to update estimates of abundance, use sophisticated techniques to assess the stock composition in fisheries, adjust openings by time and area, and change fishing plans during the season in response to real time information. Recently, when faced with uncertainty, managers have started to use risk-averse, precautionary approaches to setting fishing plans, especially when they lack the ability to adjust a fishery during the fishing season for some reason.

As a result of the above, natural escapement numbers for many stocks in Puget Sound have been higher in recent years than the several decades before that. For example, the year 2001 saw the highest Chinook salmon spawning escapement for the Snohomish River since the beginning of the database in 1965, and 2008 saw the second highest level (Fig. 1). The 4-year moving average Snohomish Chinook escapement has been consistently above 6,000 fish since 2001 and below that level in all but one year from 1965 to 2000 (Fig. 1). There is a similar pattern for Chinook escapement in the Skagit and other Puget Sound rivers.

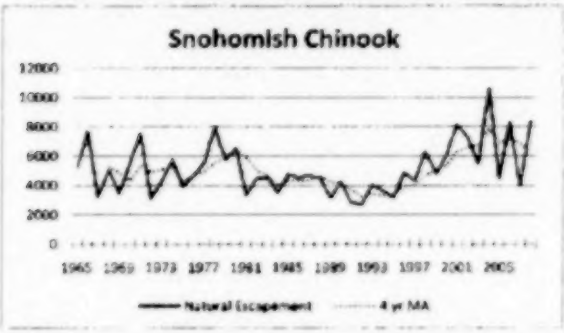

Figure 1. Snohomish chinook salmon escapement, 1965 - 2008. Annual observed values and 4-year moving averages (MA) are shown. Data from WDFW as reviewed and agreed to by the tribes.

Similarly, recent years have seen the highest escapements for coho (Fig. 2) in the Snohomish and chum (Fig. 3).

The increases in escapement for Chinook, coho, and chum since the late 1990s can all be attributed to decreasing harvest rates (for example, Fig. 2). However, there has been no corresponding increase in production that resulted from the higher escapements for any species, as shown, for example, by the failure of these runs to continue to grow, and in fact

exhibit some decline in recent years' escapement. From this and other lines of evidence[11] I conclude that overharvest is not a current factor limiting the production of salmon in most Puget Sound rivers.

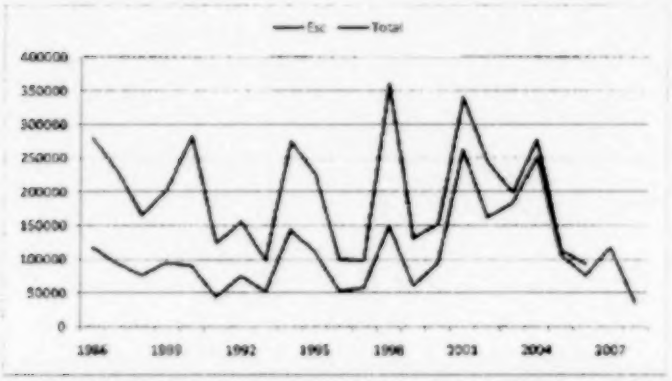

Figure 2. Graph of natural spawning escapement (Esc, lower line) and total run size (Total, upper line) for Snohomish coho, 1986-2006. The difference between the lines is harvest, which has greatly decreased over the period. The upturn in escapement is not associated with an increasing run size, suggesting that the escapement increase was due to the harvest reduction. SOURCE: My analysis of run size using exploitation rates from post-season "backwards FRAM" model runs computed by Larrie Lavoy of WDFW.

Hatcheries

Hatcheries have been used for more than 100 years in Puget Sound. As habitat was lost blocked, or irrevocably modified, agencies continued to build enhancement facilities with the thought that they could make up for declining natural production of salmon. Today they are ubiquitous, with state, tribal, and federal hatcheries operating in every major watershed (Fig. 4).

The theory behind salmon hatcheries is that, by removing a portion of the production from the dangers of part of the natural salmon life cycle, the overall productivity can be increased, thereby creating an opportunity for harvest that would not be present using natural production alone. The portions of the natural life cycle avoided in the hatchery life cycle are spawning, incubation, and early rearing. In some programs, fish are held and fed for up to a

[11] For example Sharma and Hilborn. *Can J Fish Aquat Sci* 58:1453-1463 (2001) analyzed data for coho salmon in 14 western Washington streams and concluded that "... the streams appear not to be spawner limited."

Habitat

It is almost universally agreed among salmon biologists that the principal factor contributing to the decline of salmon in the Case Area is loss of habitat required at several key life stages, for example, spawning and rearing, and degradation of the quality of remaining habitat that has not been fully lost.

Ocean Conditions

Survival of salmon from the point of migration from the estuary to the ocean to return to the river of origin is subject to fluctuating survival rates. Whereas some of the relationships between human activities and salmon survival in freshwater habitats are well understood, managers usually treat survival in the ocean as a "black box" that cannot be altered by our actions. Marine survival patterns are characterized by both interannual fluctuations and regime shifts. The latter represent fundamental changes in average survivals lasting 10 -20 years and giving rise to periods of "low", "moderate", or "high" ocean survival. The challenge for scientists trying to understand the causes of variability in salmon abundance is to control for marine survival fluctuations when looking for relationships with other factors.

The relationship between marine survival and freshwater survival can be illustrated in a conceptual model from an article by Peter Lawson, now with NOAA Fisheries (Fig. 5). In the face of both fluctuating ocean survival and degrading or shrinking freshwater habitat, a salmon abundance graph will show a pattern of fluctuating decline. As an example, using one of the longest available datasets for Puget Sound salmon, the terminal run of Skagit River Chinook appears to follow this pattern very closely (Fig. 6). The year-to-year variations reflect oscillating drivers, such as marine survival, annual climate variation, and the like. But, the overall trend for the 50-year period is downward, which can only be due to the effect of continually worsening freshwater habitat conditions. This pattern of fluctuating decline is seen in time series graphs of many Case Area salmon run sizes and catches.

A recent real world example of the conceptual model in Fig. 5 is the collapse of the Sacramento River fall Chinook stock and subsequent closure of the entire salmon fishery in California and southern Oregon. Experts reviewing the causes of this decline cite poor ocean conditions as the proximate cause of the production failure[4]. However, they point out that habitat loss and degradation has greatly weakened the resilience of Sacramento River fall Chinook such that the effects of poor ocean survival are exacerbated. They state that the ultimate cause that turned a production decline into a collapse was the loss of habitat quantity, quality, and diversity, and reliance on a small number of hatchery programs. Poor ocean conditions can cause poor survival, but loss of freshwater habitat worsens the effect of this on the resource.

[4] Lindley, S T and 25 coauthors (2009) "What caused the Sacramento River fall chinook collapse?" Pre-publication report to the Pacific Fishery Management Council, March 18, 2009
http://www.pcouncil.org/bb/2009/0409/H2b_WGR_0409.pdf

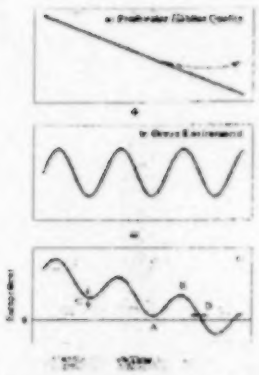

Figure 5. Graph of the relationship between freshwater production trends and marine survival fluctuations. SOURCE: *Fisheries* magazine[11].

Figure 6. Skagit River terminal area chinook run size, 1952- 2002. SOURCE: Skagit Chinook recovery plan.

[11] Copied from Lawson, P. (1993) Cycles in ocean productivity, trends in habitat quality, and the restoration of salmon runs in Oregon. *Fisheries*, Bethesda, MD

3. Current state of the salmon fishery

Current Harvest Patterns

In the Boldt Case area salmon harvest has shown a general pattern of decline for the last 30 years, at least. Tribal harvest deviated from this pattern for awhile, after the final decision in *U S v Washington* when tribal fleets expanded after the tribes were no longer prevented from exercising their rights to harvest 50% of the harvestable surplus from runs passing through their usual and accustomed fishing areas. However, since the mid-1980s, both tribal and non-tribal harvest in the Case Area has shown a fluctuating downward trend (Fig. 7).

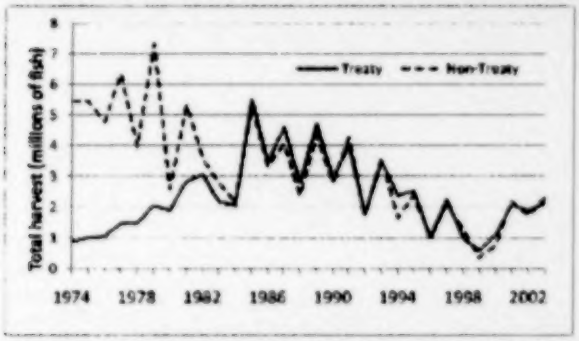

Figure 7. Total harvest of salmon and steelhead, all species, in the Case Area, 1974 - 2003. SOURCE: Harvest information provided by Keith Lutz[10].

Like salmon runs, salmon harvest is variable and affected by many factors. Tribal harvest numbers are determined by run sizes, fleet effectiveness, salmon prices, alternative economic opportunities, harvest of Case Area runs north of the US/Canada border, and conservation constraints on fisheries targeting abundant species in order to protect less abundant species harvested coincidentally. In my opinion, the decline in all harvest since at least the mid-1970s, and the decline in tribal salmon harvest since the mid-1980s is due to a general overall decline in salmon abundance and diminished opportunities on the ability to harvest abundant stocks because of increasing requirements to conserve weak stocks. Although many factors affect salmon abundance and harvest opportunity from year to year, the overall downward trend can only be attributed to loss of habitat quantity and quality.

Although tribal harvest opportunities continue to be available, these are increasingly dependent on strict controls as to the time, places, and manner of fishing, as well as on the artificial production of fish at salmon hatcheries. For example, the Tulalip Tribes harvest of

[10] Declaration of K. Lutz April 2009.

Chinook salmon has shown a slight decline over the past 30 years, but a major shift of the entire fishery to a small terminal area where hatchery fish can be targeted (Fig. 8). A similar shift is evident for coho (Fig. 9). Thus, due to chronic conservation concerns and lowered abundance of natural origin stocks, much of the Tulalip usual and accustomed fishing area is closed to salmon harvest at all times or opportunities are greatly diminished. Much tribal harvest now depends on hatchery fish produced at the tribes' own on-reservation enhancement facility.

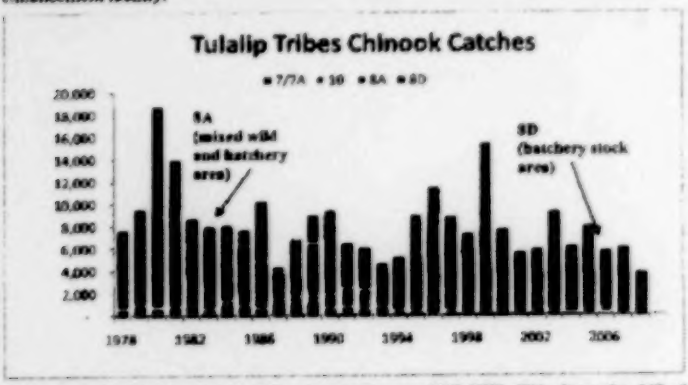

Figure 8. Tulalip Tribes chinook salmon harvest by area, 1978-2008. This shows the shift of nearly all harvest into Area 8D, a small terminal area where tribal members can harvest returning fish that were produced by the tribe at the Tulalip Hatchery. Nearly all of the tribe's usual and accustomed fishing area, extending 120 miles from the Canadian border to south of Seattle is permanently closed to chinook salmon harvest due to conservation concerns for natural chinook stocks. SOURCE: WDFW-tribal fish ticket database.

The reliance on hatchery production for maintaining harvest prevails for many of the tribes in the Case Area, especially in Puget Sound. For example, in terminal area net fisheries for coho, which are predominantly tribal, nearly 70% of the catch has on average been of fish that were produced in hatcheries (Table 3). Thus, these tribal fisheries depend heavily on hatchery production for coho salmon harvest opportunity.

While hatchery production can provide some harvest opportunity in the face of declining natural production, it comes at a cost in funds required to run the hatchery and potential negative impacts of hatchery fish on natural stocks. Hatchery fish are also less diverse than wild fish in their life history patterns and thus more susceptible to declines from natural catastrophes or changes in natural conditions. A current example is the recent severe decline of hatchery Chinook from the Sacramento River system and closure of the entire ocean fishery from Oregon south for at least two years. Increasing reliance on hatchery fish is most often associated with increased risk to fisheries. Only robust natural production can support sustainable salmon fisheries over the long term.

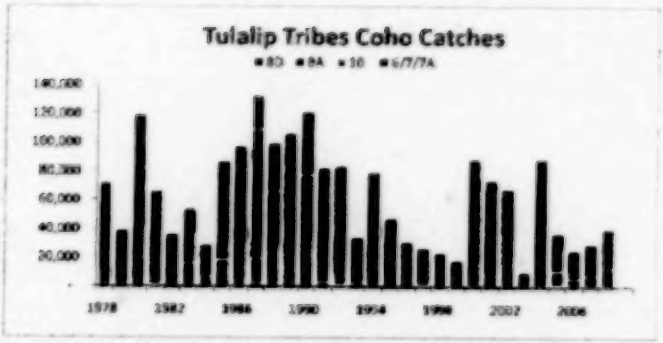

Figure 9. Tulalip tribes coho catches, 1978-2008, showing a shift to Area 8D similar to that shown for Chinook in Fig 4. SOURCE: WDFW-tribal fish ticket database.

Harvest Management in the Case Area

In the Case Area, salmon fisheries are jointly managed by the Case Area tribes and the State of Washington. These comanagers share responsibility for conservation of the resource and jointly determine how fishing opportunity will be apportioned between the non-tribal and tribal fishers so that each side will have a chance to harvest their share of the resource. The managers are then responsible for issuing and enforcing regulations that apply to their own users and that fit within the jointly developed management plans.

Salmon harvest management seems straightforward on the surface. A stock of salmon (for example, all of the fish of one species returning to a single river system) will have a requirement for a number of fish that must remain unharvested ("escapement goal") and pass through to the natural spawning areas in the river system. This number is often set as the population size that will allow for maximum sustainable harvest as determined *either* by analysis of observed escapement and return data from the recent past or from an analysis of current habitat quantity and quality. Fish returning in excess of this escapement goal are deemed harvestable, and the harvestable fish are allocated 50% to tribal fisheries and 50% to non-tribal fisheries.

Due to several factors, this simple model of salmon harvest management rarely applies in the real world. One complication is that the model does not work if there are fewer fish returning than are required for the escapement goal. Three factors often lead to this situation 1) low production due to degraded freshwater habitat, 2) poor survival in estuary and ocean waters, and 3) interceptions of fish north of the southern United States – Canada border.

When fewer fish than required for the escapement goal return, one might assume that there would be no harvest on that stock. However, the second complication to the simple harvest model comes into play here, namely the mixed-stock problem. Nearly all salmon fisheries are comprised of mixtures of stocks and species. Only rarely is a single species harvested, and even more rarely is all of the catch of one species from a single stock. In terminal areas, in rivers or near their mouths, or near hatchery release facilities, salmon harvests are predominantly of a single stock, but nearly always, there is some mixture of stocks in every fishery, and every stock is found to some degree in many fisheries. Thus, to realize a zero harvest on even just a few stocks might mean complete closure of much of the entire west coast to salmon fishing. Therefore, some low level of harvest is allowed on weak stocks, and fisheries are "shaped" through time, area, and gear restrictions to maintain low harvest rates on stocks of conservation concern while allowing more harvest on stronger stocks. To address the complexity of the mixture of stocks and fisheries, the comanagers use a computer model in their annual fishery planning discussions.

The FRAM Model for coho and Chinook

Salmon fisheries occur all along the west coast, with different stock mixtures for each combination of gear type, fishery location, and time of year. The comanagers use the Fishery Regulation Assessment Model (FRAM) to predict the cumulative impacts of annual fishing plans on west coast Chinook and coho stocks[17]. The coho FRAM includes 123 stock groups, representing nearly all west coast coho production. The Chinook FRAM includes 33 stock groups, representing most Chinook salmon production spawning in rivers from north-central Oregon northward to southern British Columbia. There are 73 fisheries in the Chinook FRAM and 198 fisheries in the coho FRAM. Most "stocks" in both models represent aggregations of actual stocks or populations and most "fisheries" in both models represent aggregations of actual fisheries (a particular gear type fishing in a particular area at a particular time period). The coho model divides the year into five segments[18] ("time steps"), and the chinook model into four segments[19], again representing an aggregation of what might be more accurately portrayed at a finer time resolution. So, the complexity of the model may be represented by the product (time steps) x (stocks) x (fisheries). But this is only a fraction of the complexity of the actual fishery.

The FRAM model uses abundance predictions for all of the model stocks as one key annual input. These are completed by the comanagers' biologists in December and January of each year, usually using statistically-derived relationships between the number of fish returning and prior spawning escapement, prior juvenile outmigration, and environmental variables. Where the numbers of juvenile outmigrants can be estimated with some degree of accuracy, as with in-river smolt traps for Chinook and coho or with beach seining for pink and chum fry, this often a precise predictor of subsequent adult returns for naturally-produced fish. If juvenile outmigrants cannot be directly estimated, then surrogate variables, such as the number of fish in the spawning escapement (directly related to the potential number of juvenile outmigrants produced), quantity of streamflow in the summer low-flow period (directly related to the amount of freshwater rearing habitat), and the effect of high water

[17] See Model Evaluation Workgroup. 2007. "Fishery Regulation Assessment Model: An overview for coho and Chinook". Pacific Fishery Management Council, Portland, OR, and supporting documents cited therein.
[18] Jan-Jun, Jul, Aug, Sep, Oct-Dec
[19] (prior year) Oct-Apr, May-Jun, Jul-Sep, Oct-Apr (following year)

THE HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, *et al.*, Plaintiff, vs. STATE OF WASHINGTON, *et al.*, Defendant.	No. C70-9213 Subproceeding 01-1 DECLARATION OF TYSON WALDO

I, TYSON WALDO, declare as follows:

I am over the age of eighteen, a United States citizen, and am competent to testify as to the matters set forth herein. I make this declaration on the basis of my personal knowledge, skill, experience, training, education and review of the State's culvert data, provided to the Tribes in this case. This declaration is made by me for the purpose of explaining how I prepared the maps and tables identified as Plaintiff Intervenor Tribes Proposed Exhibits.

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'Habitat.dbf' have already been adjusted for habitat quality and the annual 60-day low flow period.

37.3 In January of 2009, the State provided a WDFW FPDSI Habitat.dbf file containing habitat survey data from 1339 sites. Of those 1339 sites, 806 sites have at least some measure of stream length habitat upstream. Of those 1339 sites, 460 sites have at least some measure of "Spawning Habitat" upstream, and 507 sites have at least some measure of "Rearing Habitat" upstream.

37.4 I queried the FPDSI CULVERT.dbf and FPDSI_P1.dbf to select sites that are state-owned and potentially blocking anadromous fish passage. This resulted in 1155 sites. For those 1155 sites, there are FPDSI Habitat.dbf records for 1068 sites. From those 1068 sites, at least 634 sites have some measure of recorded habitat gain. Specifically 634 sites have a measure of habitat length, 411 sites have a measure of spawning habitat area, and 458 sites have a measure of rearing habitat area. Of the 634 sites, 147 are multiple upstream barriers and are removed from the potential lineal gain estimation. Of the 411 sites, 117 are multiple upstream barriers and are removed from the potential spawning habitat gain estimation. Of the 458 sites, 134 are multiple upstream barriers and are removed from the potential rearing habitat gain estimation. **Upstream of the remaining 487 sites with a measure of lineal gain, there are potentially705.79 miles of upstream habitat. Upstream of the remaining 294 sites with a spawning habitat measure, there is potentially 758,550 square meters of spawning area, and upstream of the remaining 324 sites of with a rearing habitat measure, there is potentially 3,702,693 square meters of rearing area.** The results are found in Proposed All Tribes, "Table 1 Estimate of anadromous

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salmon habitat upstream of DNR and DOT barrier culverts."

38. **WDNR Culverts**

38.1 The WDNR datasets , Barriers.mdb\ Culverts GIS dataset, the 'PI-2 21-all fish barrier costs 7-03.xls', the DNR_Update of Culverts for 1st & 2nd Set.xls and DNR's-repaired barriers dec 2006.xls were provided to me by counsel on December 19, 2006. In January of 2009, I received the file 'DNR repaired barriers nov2008.xls" and the R0008653\ culverts.shp file. In June of 2009, I received 'barrier1208.xls', a list of the 457 remaining DNR blocking culverts in the Case Area. The following assessment of WADNR barrier culverts in the case area is based on the list provided in the 'barriers1208.xls' file, the R0008653\ culverts.shp file and on the 'PI-221-all fish barrier costs 7-03.xls' file.

38.2 I linked the 'barriers1208.xls' to the R0008653\ culverts.shp file. I queried on the {CLVT_ANAD_FLG} field to select WDNR culverts associated with anadromous habitat in the case area. I queried 230 of the 457 culverts with anadromous fish presence from the combination of these two DNR datasets.

38.3 From the 230 blocking WDNR culverts I accounted for and filtered out multiple blockages upstream of a blockage as I had done for the state-owned culverts in the WDFW data. As with those culverts, had I not done so, my query would have resulted in multiple counts of the same upstream habitat. The final query resulted in 208 WDNR-owned culverts potentially blocking anadromous fish habitat.

38.4 To estimate potential upstream habitat and fish production, I linked the 208 sites to

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the 'PI-2 21-all fish barrier costs 7-03.xls' dataset. Of the 208 sites, 27 have no associated record in the 'PI-2 21 all fish barrier costs 7-03.xls' file. The 181 culverts that link from 'barriers1208.xls' to the 'PI-2 21 all fish barrier costs 7-03.xls' dataset are used for this assessment.

38.5 The WDNR data reports habitat length above a culvert in the [Upstream Hab. Gain (ft)] field in the 'PI-2 21-all fish barrier costs 7-03.xls' dataset. I converted the values in the field from feet to miles to summarize potentially blocked habitat length by WRIA in miles. The WDNR 'PI-2 21-all fish barrier costs 7-03.xls' dataset does not report on spawning habitat, so no spawning habitat is summarized for the WDNR potential blockages.

38.6 The WDNR 'PI-2 21-all fish barrier costs 7-03.xls' dataset record "rearing" habitat in the [Hab. Gain in m2] field. Unlike the WDFW data, the WDNR data also does not take into account habitat quality. I adjusted the [Hab.Gain in m2] field in the DNR data for habitat quality so that it could be used to calculate upstream habitat or adult anadromous salmonid production impacts using the WDFW methodology. To factor in habitat quality, I assumed a condition of 'Poor' for potentially blocked habitat above WDNR culverts. I assumed 'Fair' because in the Culvert Assessment Manual 'Fair' is the default habitat quality weighting (WDFW 2000). The WDFW methodology assigns a weight of 0.67 to a 'fair' condition. I therefore multiplied all the records in the [Hab. Gain in m2] field by 0.67. I did not adjust the WDNR habitat areas to reflect the annual 60-day low flow period because the data needed to calculate the annual 60-day low flow period for the WDNR culverts was not available. Additionally, WDNR calculates [Hab. Gain in m2] as (2* ([Width_ Ordinary High Water Mark]*[Upstream Hab. Gain_length])/2, so it is

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already a wetted area fraction of total habitat area.

38.7 **From these data, I summarized that there is potentially 198.75 miles and 364,713.56 square meters of anadromous salmon habitat upstream of 181 WADNR barrier culverts.** The results are found in Proposed All Tribes' Exhibits "Table 1 Estimate of anadromous salmonhabitat upstream of DNR and DOT barrier culverts."

Task 3: Potentially blocked habitat above state-owned culverts

- 19_Table 1 Estimate of anadromous salmon habitat upstream of DNR and DOT barrier culverts.pdf

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed this 13th day of October, 2009, at Bellingham, Washington.

_____

Tyson Waldo

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Table 1. Estimate of habitat upstream of DNR and DOT culverts.

WRIA	OWNER	Length_M1	Spawn_M2	Rear_M2
01	DFW/DOT	58.05	41882.00	235858.00
03	DFW/DOT	44.64	32450.00	185233.00
04	DFW/DOT	4.02	1935.00	16227.00
05	DFW/DOT	30.01	41084.00	143013.00
06	DFW/DOT	4.48	888.00	110788.00
07	DFW/DOT	63.15	38690.00	260702.00
08	DFW/DOT	80.18	116239.00	779813.00
09	DFW/DOT	1.61	142.00	12885.00
10	DFW/DOT	21.04	10857.00	88880.00
11	DFW/DOT	22.13	11206.00	117528.00
13	DFW/DOT	3.12	1624.00	18204.00
14	DFW/DOT	20.82	18504.00	87942.00
15	DFW/DOT	80.11	118180.00	479887.00
16	DFW/DOT	6.16	10258.00	36310.00
17	DFW/DOT	40.92	28208.00	182221.00
18	DFW/DOT	38.58	40877.00	88587.00
19	DFW/DOT	42.17	46895.00	95064.00
20	DFW/DOT	31.69	76323.00	113482.00
21	DFW/DOT	20.19	40330.00	64319.00
22	DFW/DOT	66.64	84854.00	509289.00
23	DFW/DOT	26.27	16808.00	71108.00
	TOTAL	705.78	758880.00	3702883.00
01	DNR	2.28	0.00	7075.48
03	DNR	12.76	0.00	31038.08
04	DNR	2.43	0.00	5539.26
05	DNR	9.16	0.00	22617.40
07	DNR	24.80	0.00	45831.98
08	DNR	0.28	0.00	273.08
09	DNR	0.98	0.00	1851.38
11	DNR	0.00	0.00	0.00
14	DNR	0.85	0.00	1668.98
15	DNR	4.23	0.00	7451.00
16	DNR	0.00	0.00	0.00
17	DNR	12.81	0.00	15158.91
18	DNR	0.00	0.00	0.00
19	DNR	6.62	0.00	12257.10
20	DNR	32.20	0.00	57875.50
21	DNR	23.39	0.00	42988.32
22	DNR	15.10	0.00	54398.15
23	DNR	47.85	0.00	58710.84
	TOTAL	195.74	0.00	384713.58
	CUMBERED	901.53	758880.00	4087408.58

WASHINGTON DEPARTMENT OF FISHERIES
WASHINGTON DEPARTMENT OF TRANSPORTATION

FISH PASSAGE PROGRAM
PROGRESS PERFORMANCE REPORT
FOR THE BIENNIUN 1991-1993

PREPARED FOR THE
WASHINGTON STATE LEGISLATURE

December 1992

Interagency Agreement FY 92.30(1)GC 9392

SUBMITTED BY

Tom Burns
Greg Johnson
Tanja Lahr

WASHINGTON DEPARTMENT OF FISHERIES
HABITAT MANAGEMENT DIVISION
SALMON HABITAT ENHANCEMENT AND REHABILITATION UNIT
AND TECHNICAL RESOURCE SECTION

Cause No. C70-9213, Sub. 01-1
Plaintiffs' Exhibit AT-052
7 - 1000001

EXECUTIVE SUMMARY

Wild salmon[1] have important cultural, ecological, and economic value to the people of the state of Washington. One threat to this resource is human-made migration barriers created by improperly installed or undersized culverts commonly installed to allow road crossings over salmon-bearing streams. Many of these culvert barriers exclude juvenile and adult salmon from valuable habitat, resulting in a decrease in salmon production and harvest opportunity. The 1991 Washington State Legislature recognized that culvert barriers threaten sustained salmon populations and the resulting harvest opportunity in this state. Hence, the Legislature in 1991 directed the departments of Fisheries (WDF) and Transportation (DOT) to cooperate in the inventory and correction of salmon migration barriers at state highway road culverts during the 1991-1993 biennium. This report documents 1991-93 biennium activities to date and planned activities for biennium 1993-95.

For biennium 1991-93, WDF and DOT participated in fish barrier resolution through two Memoranda of Understanding (MOU). The first concerns WDF, DOT, and Department of Wildlife (WDW) compliance with the Hydraulic Code. The second is an interagency agreement by WDF and DOT to conduct a fish passage inventory of state highway culverts and to correct six known barriers. This was subsequently modified to correct five barriers and to complete preliminary planning of two others. The optimistic goal of fish barrier resolution at all state road culverts is 20 years.

WDF and DOT also participated in interagency training and education of biologists, environmentalists and engineers. This included a full day training on salmon life history and fish passage problems at culverts.

Consistent with the interagency agreements, WDF has initiated an ongoing inventory of state highway culverts. To date WDF has inspected 726 state highway culverts in five of the six DOT districts. Of those inventoried 264 (36.4%) were determined to interfere with fish passage some percentage of the time, of which 126 (17.4%) were total blockages (Figure 1). Many more barriers are expected to be found with further inspections. Also, upstream habitat evaluation must still occur for most of the blockages. Complete correction of all existing state highway culvert barriers will take decades of planning, inventory, evaluation, and construction. This effort will clearly require administrative support for interagency cooperation.

[1] The orientation of this report is toward salmon, but many comments are applicable to wild steelhead as well.

BACKGROUND

The five species of salmon which evolved in the Pacific Northwest are strongly anadromous, meaning they reproduce in fresh water and mature in the ocean. All salmon have in common a requirement to use clean, stable, well oxygenated gravel habitats for spawning, often in the terminal headwaters of freshwater streams and rivers. Access to these habitats cannot be blocked without endangering locally adapted salmon. However, through the activities of humans and rare milestones in nature, salmon are sometimes blocked from prime spawning and rearing areas. A significant threat to the complete life cycle of any distinct group of salmon is road construction and the installation of road culverts, which often pose migration barriers. Increasing numbers of roads and culverts are a common product of a growing human population in Washington. Culverts often pose immediate or eventual migration barriers to salmon due to design which does not ever allow fish passage or design that does *not* account for the dynamic nature of flowing water, therefore resulting in a delayed barrier. These dynamics are caused by changes in hydrology of streams due to road-associated activities such as paving, fires, or clear cutting.

A common misconception is that barriers affect only adult salmon. Current life history research indicates movements of juveniles upstream into springs, ponds, marshes, and seasonal streams. Many of these areas are blocked to juvenile salmonids by culverts. Juvenile salmon are less powerful swimmers than adults and their ability to migrate through culverts is not clearly understood, which warrants further investigation.

Salmon provide this state valuable sport and commercial fisheries, but to do so they must migrate unrestricted to native streams in sufficient numbers to reproduce abundant, vigorous offspring. In Puget Sound and Strait of Juan De Fuca tributaries, an incomplete WDF inventory shows that 420 human-caused fish migration blocks of various kinds exist (excluding hydropower projects). At least 350 miles of spawning and rearing habitat are subsequently excluded from production in those areas. Human-caused blockages to adult salmon spawning and rearing habitat continues to be one of the most common and avoidable ways fish production is lost in the Pacific Northwest.

FISH PASSAGE INVENTORY

Process

The WDF Fish Passage Inventory can be divided into four phases: 1) a search on state highways for stream culverts which prevent or restrict the upstream migration of salmon, 2) further investigation of stream sections where these culverts are located to determine salmon presence in the streams and fish access up to the culvert, 3) measurement of habitat quality and quantity above the barrier culverts, and 4) engineering evaluation of improvements needed for fish passage. Data management and development of project lists occurs in conjunction with all four phases.

Search

Washington is divided into six Districts by DOT. WDF uses these designations for the culvert inventory schedule. District boundaries generally follow county lines, though some are different. Counties included in each district are: District 1- Island, King, San Juan, Skagit, Snohomish and Whatcom; District 2- Chelan, Douglas, Ferry, Grant and Okanogan; District 3- Clallam, Grays Harbor, Jefferson, Kitsap, Mason, Pierce and Thurston; District 4- Clark, Cowlitz, Klickitat, Lewis, Pacific, Skamania and Wahkiakum; District 5- Asotin, Benton, Columbia, Franklin, Garfield, Kittitas, Walla Walla and Yakima; and District 6- Adams, Lincoln, Pend Oreille, Spokane, Stevens and Whitman (Figure 2).

The order of District inspection was determined so the evaluation of culverts and streams would coincide with adult salmon presence to help verify fish access to culverts. For example, District 3, which includes the Olympic Peninsula, is being inventoried during November when coho salmon runs peak. Streams in Districts 5 and 2, where spring and summer Chinook are present, were evaluated during spring and summer of 1992. For this reason, District 1 was inventoried first, followed by Districts 5,2,3,4 and 6. Generally, three months are allotted to the inventory of culverts in each district.

The search for barrier culverts is conducted by driving each state highway and stopping at each stream crossing. The streams are identified using the WDF Catalog of Washington Streams and Salmon Utilization and a DeLorme Atlas of Washington State. The highway mile of the culvert is noted, using the vehicle odometer and highway mile posts. Those streams not appearing on either reference are identified by highway mile. Bridges are assumed passable and not evaluated.

Washington Department of Wildlife Pacific Northwest Environmental Database, and any other available information. Depending on the amount of information obtained from these sources, WDF may also identify species by electroshocking the stream, using a portable backpack electrofisher.

Downstream barriers are located by surveying the stream from the culvert to the mouth. All barriers to salmon are noted. A culvert with natural barriers downstream may be given no further consideration as a project of immediate importance. If a resolvable human-caused barrier is located below a DOT fish passage problem the project still is given a priority.

Habitat Measurement

The amount of salmon habitat blocked by each impassable culvert is measured next. Habitat evaluation begins at the barrier, and proceeds upstream. The string from a belt chain is tied to the culvert, and surveyors (usually two people) walk upstream. The belt chain measures the distance walked, in meters.

In addition to measuring the length of usable stream above the culvert, surveys divide the stream into pools, riffles, and rapids. Total surface area is also calculated. For creeks less than one mile long, a 30-meter sample is taken after every 0.1 mile walked. In streams more than one mile long, 60 meter lengths are sampled every 0.2 miles. In each sample area, the streambed composition is estimated (percentages each of boulder, rubble, gravel and sand present), and the stream gradient is measured with a clinometer (see Appendix C for physical survey format).

Measurement continues until a natural barrier is reached, or the stream is too small or steep for salmon use. If a human-made barrier is reached, the end of immediate habitat is noted, and the survey is continued. The area above this barrier is termed potential habitat. If a natural barrier is reached, or gradients exceed 7%, the survey is ended.

The information collected in the habitat survey is entered in a spreadsheet program which uses the riffle, pool and rapid measurements to compute the total spawning and rearing habitat areas (in square meters) for both the immediate and potential habitat areas. Pool areas are considered rearing habitat, and riffle areas are considered spawning habitat. Rapids are considered unusable by salmon, except as transport waters. Riffle:pool:rapid ratios are also computed.

The Priority Index

Characterizing and prioritizing corrections to fish passage barriers is complex in terms of cost, habitat gain, and multi-species utilization. Early in the inventory planning stages, a numeric modeling approach to prioritizing projects was developed, which recommended correction of those passage problems which were most feasible first. To do this, the numerous factors which affect a project's feasibility are used, including: passage improvement, production potential of the blocked stream, size of blocked stream habitat, affected fisheries, affected stock status listed in the Washington State Salmon and Steelhead Stock Inventory (SASSI)[1], and project cost. The result is a numeric indicator giving each project's priority. LOG .25 (the quadratic root) of the project variables product is calculated to provide a more manageable number for the priority index. Supporting data for the fish passage prioritization are attached in Appendix C. The priority index (PI) for each barrier is calculated as follows:

$$PI = \sum_{\text{all streams}} [(BPH) \times FDC]^{1/4}$$

Where:

PI = Priority index (i.e., relative project benefit considering cost)

B = Proportion of passage improvement (i.e.,proportion of run expected to gain access by the project)

P = Annual adult equivalent production potential per m^2 (this incorporates juvenile survival factors if juveniles, but not adults, utilize habitat, Appendix D).

H = Habitat gain in m^2

F = Fishery impact modifier (Appendix E)
- 3 = a stock managed on a wild stock basis whose enhancement would have allowed a higher exploitation rate at least twice in the last eight years in mixed stock fisheries (where allocation units are mixed). (e.g. Skagit or Hood Canal coho)
- 2 = a stock managed on a wild stock basis whose enhancement would not have allowed a higher exploitation rate at least twice in the last eight years in mixed stock fisheries, but would typically have allowed a higher exploitation rate in terminal and/or extreme terminal fisheries (e.g. Snohomish or Stillaguamish chum).
- 1 = a stock not meeting the conditions for 2 or 3 (e.g. Nooksack coho).

D = Depleted Stock modifier
- 3 = a stock listed as critical in the SASSI report (e.g. Snake River spring/summer chinook or sockeye).

[1] Report is being finalized

2 = a stock listed as depressed or a stock of concern in the SASSI report (e.g. Nooksack coho)
1 = a stock not meeting the conditions for 2 or 3 (e.g. Samish chum)

C = Cost modifier (low, medium, high)
3 = incremental funds needed ≤$100K because of actual cost &/or constituency (monetary) support &/or funds that are already programmed for road improvement that do not have to be spent specifically on fish passage
2 = incremental funds needed >$100K and ≤$500K....
1 = incremental funds needed >$500K....

Activities and Costs by DOT District

Following is a summary of WDF work completed to date in each district. See Table 1 for expenditures by district.

District #1

Highway types in District 1 range from the urbanized I-5 corridor and freeways in King and Pierce counties, to rural mountain roads in the northern reaches of the district. Steep rural roads often have high road fills over stream crossings, making access and culvert evaluation physically difficult. High-speed urban roads are also difficult to evaluate, due to high volumes of traffic and the dangers of parking and working along narrow road shoulders. Also present are lowland tributaries which flow through wetlands and agricultural areas. All five species of Pacific salmon (chum, chinook, coho, pink and sockeye) are present in this district, although not all are necessarily represented in each stream. Streams impacted by barriers at state highways in this district are used by chum and coho; backwatered areas and small tributaries are important for the rearing of coho juveniles. Chinook salmon are also present in this district. Adult chinook generally utilize large tributaries, usually spanned by bridges. Sockeye salmon are found in Lake Washington and its tributaries, while pink salmon are widely distributed in the district.

Work in this district took place beginning in January of 1991, and ending in early April of 1992 (although work began in November, the time between November and mid-January was spent in training and methodology development). After preparation, inventory in District 1 began January 16th. March and April were spent investigating salmon presence and conducting downstream surveys, and measuring habitat above barrier culverts. Due to the three-month district limit, WDF was not able to completely evaluate all state routes in this District, nor were we able to survey the stream area above and below all of the impassable culverts found.

APPENDIX C

Supporting data for DOT inventory fish passage priority index.

COHO

Estimated smolt to adult survival for Washington streams = 10%. State of Washington Department of Fisheries Department of Natural Resources Progress Report No. 233 Riverine Pond Enhancement Project October 1982-December 1983. W. Phil Peterson, October, 1985 p. 33.

Estimated fingerling to smolt survival for Skagit River waters = 40%. Skagit River off channel trapping. Chris Detrick personal communication - 1992.

Estimated production per square meter of habitat for coho salmon smolts = .43/square yard or .5/square meter. Methodology for Determining Puget Sound Coho Escapement Goals, Escapement Estimates, Pre Season Run Size Prediction and In-season Run Assessment. Technical Report 38, Washington Department of Fisheries. 1977.

Based on this information the estimated adult production per square meter of total stream area in Washington streams is .05 adult coho per square meter of stream area.

SPRING CHINOOK

Marshall and Britton (1980) use coho production potential to apply to spring chinook - assumes that yearling spring chinook and yearling coho occupy their respective habitats at the same densities = .5/M square.

Mean smolt to adult survival (Lindsay and Jonasson - 1983) and Wahle et. al. (1981) estimate .4 to 3.2% smolt/adult survival, mean of this = 1.8% for spring chinook. White Salmon River Productivity Report Draft, November 1989, p. 19.

Spring/Summer chinook modifier = .009 adults/M square of total habitat.

FALL CHINOOK

IFIM Method - resulting value is factored by a smolt density value of .37 smolts/M square (Chapman - 1991), derived from research on the Big Qualicum River in British Columbia. Mean survival from smolt to adult = 1.5% (Wahle and Vreeland - 1978) White Salmon River Productivity Report - November, 1989. Draft. p. 22.

SOCKEYE

Foerster - 1968 estimates overall survival of Fraser and Columbia River Sockeye at 0.25% egg to adult. Further he estimates the sustained catch to escapement ratio at 4:1 for those regions. P. 68. Foerster further documented one fully utilized 360 square yard section of Williams Creek to be at 103 females and 109 males for a density of 3.5 square yards (2.9 square meters). At densities above this "new unspawned fish attempting to start a redd were attacked by other females."

Hence: for sockeye, one sockeye redd = 2.9 meters square of spawning habitat. Two spawning adults will produce 3,800 eggs x .25%. Overall survival = 8.75 adults per 2.9 meters square = 3 adults produced per meter square of spawning habitat (p. 122).

Foerster, R.E., The Sockeye Salmon, Oncorhynchus nerka. Fisheries Research Board of Canada, Ottowa 1968. Bulletin 162.

CHUM

Tom Burns, unpublished, calculated chum production by the following:

0.5 (female/meter square) X meters square of spawning habitat X 3,500 eggs/female X .10 egg to fry survival X .01 fry to adult survival.

PINK

Currently it is proposed this model uses chum feasibility for pinks.

FISH PASSAGE PROGRAM
PROGRESS PERFORMANCE REPORT
FOR THE BIENNIUM 1993-1995

Prepared for
THE WASHINGTON STATE LEGISLATURE
JANUARY 1995
INTERAGENCY AGREEMENT FY 92-93(1)GC 9392

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WASHINGTON DEPARTMENT OF FISH & WILDLIFE
HABITAT PROGRAM

Salmonid Screening, Habitat Enhancement, and Restoration (SSHEAR) Division

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Washington Department of FISH and WILDLIFE

Washington State Department of Transportation

Cause No. C70-9213, Sub. 01-1
Plaintiffs' Exhibit AT-053
T - 1006072

EXECUTIVE SUMMARY

For many reasons, protection of salmon and trout and the critical habitat in which they live is essential in the Pacific Northwest. One serious problem to salmonid production in Washington is impassable road culverts. In numerous cases, miles of productive freshwater anadromous fish habitat have been blocked from anadromous fish by a single barrier road culvert. Correction of human-made barriers to fish migration is one of the most cost effective habitat restoration strategies available because habitat gains from a minimal amount of work are often large. Hence fish access to habitat has become an important, timely issue and has been addressed by the Washington State Legislature during the bienniums 1991-1993 and 1993-1995. In addition, correction of human-made fish migration barriers is required by the following State Laws: RCW 75.20.060, entitled "Fishways required in dams, obstructions-penalties, remedies for failure", RCW 75.20.061, "Director may modify inadequate fishways and fish guards", RCW 77.16.210, entitled "Fishways to be provided and maintained", and RCW 77.12.425, "Director may modify inadequate fishways and protective devices"

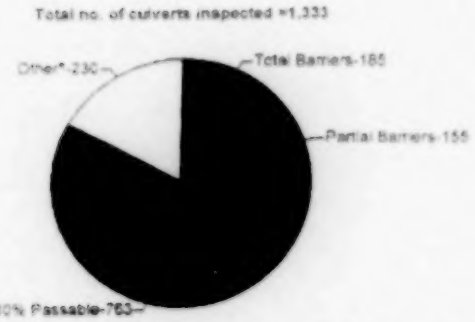
Documentation of efforts to inventory and correct fish passage problems at Washington State highway culverts is the topic of this report. It examines Washington Department of Transportation (WSDOT) and Washington Department of Fish and Wildlife (WDFW) activities pursuant to inventory and correction of fish passage barriers at state highway road culverts for the biennums 1991-93 and 1993-95. It is an update to the Fish Passage Program Progress Performance Report for the Biennium 1991-1993 completed in December 1992. Many methodologies for this inventory were developed in 1991, discussed in the last report, and will be referred to in this document. In some cases revisions to the original methodology occurred this biennium and will be discussed in this report.

For the biennium 1993-95 WDFW and WSDOT continued with inventory and fish barrier resolution through interagency agreement (Appendices II-IV). The purpose of the agreement is to provide funding to continue with a fish passage inventory of state highway culverts and to correct six prioritized barriers for the biennium that have resulted from the inventory.

The WSDOT / WDFW strategy for inventory and correction of fish passage barriers is as follows:

- Reporting and documentation of state highway road culvert fish passage problems (inventory).
- Verification of fish passage up to barrier culverts, quantification and qualification of blocked habitat, and prioritization of barriers for correction based on cost benefit evaluation called priority indexing.
- Design and construction of fish passage facilities on high priority barriers (most cost effective) with dedicated barrier correction funding.
- Concurrently identify and correct fish migration barriers associated with safety and mobility road projects.

To date, WDFW has completed all of the road culvert inventory segment and has inspected a total of 1,333 culverts on state routes throughout all six WSDOT Districts. WDFW has identified 340 barrier culverts for further evaluation. WDFW has located a total of 185 total migration barrier culverts, and an additional 155 culverts having a partial blockage to salmonids.



"Other" indicates culverts for which no passability estimates were made, due to problems such as no access up to the culvert, no anadromous habitat gain upstream of culvert, etc.

Surveys, habitat assessments, and downstream verification of fish passage up to identified barriers have been completed on 91 streams out of the total 340. A total potential rearing area of 318,000 square meters (m^2) is currently blocked by WSDOT culverts on these 91 streams; this is roughly enough wetted stream area to produce 29,000 adult salmon annually. Approximately 105 linear miles of spawning and rearing area are known to be blocked from salmonid production by barrier WSDOT culverts on the 91 surveyed streams. All physical surveys are planned for completion by July 1997.

Working together, WDFW and WSDOT have resolved ten barrier culvert problems since 1991, with planning underway for resolution of another six during the next biennium (1995-1997). To

date. WSDOT fish passage projects accomplished include:

Tumwater Creek Fishway
Parish Creek Fishway
Fisher Creek Fishway
Green Creek Fishway
Unnamed Tributary to Skykomish Fishway
Chuckanut Creek Fishway
Evans Creek Fishway
Bagley Creek Fishway
South Fork Nemah River Fishway
Squalicum Creek Fishway

Total habitat gained for these projects was 121,300 m^2, or roughly enough stream area to produce 14,600 adult salmon annually.

During the 1993-95 biennium, it was recognized that long-term planning between WSDOT and WDFW should include not only dedicated, independent funding projects, but communication between the two agencies to accomplish barrier correction in conjunction with planned road projects such as safety and mobility improvements regularly done by WSDOT. Given the number of barriers identified in the inventory, it would take over a century, with a much lower benefit to cost ratio to correct 340 barriers using only dedicated funding (correcting 3 barriers/year). The benefit/cost ratio increases as the number of culverts repaired per year increases. Using a method such as road project-associated culvert repairs, fixes would be done quickly and costs of mobilization would be greatly reduced since equipment would be on-site or in the vicinity for road construction. Road project-associated fish passage improvements would require long term commitment by the legislature and would be beneficial in correcting problems affecting many depressed salmonid stocks in need of immediate attention. In the future, this strategy could assist in avoidance of petitions under the Endangered Species Act. Working for correction through road improvement work, it was determined that over a century of fish passage work could be reduced to two or three decades. The end result would be a process incorporating accelerated correction for high priority barriers and organized, efficient correction of the remainder of barriers.

WDFW is continuing interagency education and training efforts with frequent interagency staff meetings, and by forwarding a quarterly information bulletin update summarizing activities and strategies to WSDOT. In addition, day-long workshops entitled "Fish Passage Design at Road Crossings" were conducted on June 2, 1992, November 23, 1993 and June 15, 1994. A repeat is planned for January 18, 1995, and WDFW is planning to publish articles related to fish passage and inventory of culverts for the WSDOT Maintenance Newsletter, beginning in January 1995.

Consistent with interagency agreements, WDFW has completed on-site culvert inspections within all six WSDOT Districts and is now working on habitat evaluations and fish use verifications at culverts thought to be blocking fish from usable habitat. These evaluations will be completed during the 1995-1997 biennium. Resolution of all culvert blockages will take decades of planning, surveying, design, and construction. This effort will clearly require administrative and legislative support.

BACKGROUND

It is recognized that salmon and trout are extremely important to the culture and economy of the Pacific Northwest, particularly in coastal communities, where the impacts of low salmon returns and fishing closures in 1994 have left port towns in financial crisis.

Similarly, it is recognized that wild, locally adapted salmon play an important role in a complex ecological food web that involves many types of birds and animals, some species listed as endangered, threatened, monitor, or candidate under the Endangered Species Act (ESA) depend to some degree on the distribution and abundance of salmon and trout.

Alarming declines in anadromous fish in Washington during the early 1990's have caused intensive concern among fish managers, commercial and sport fishing interests, environmentalists, Native Americans, and legislatures. Overharvest, hydropower development and habitat degradation, as well as oceanic events such as El Niño, are often referred to as causes. One habitat-related cause for weakening of salmon production which can be comparatively easily resolved is human-made barriers to fish migrations caused by improper placement of road culverts. Increasing numbers of roads and resulting culverts are a common product of a growing human population in Washington. Culverts often pose immediate or eventual migration barriers to salmon due to design which does not allow passage, or design that fails to consider the hydrology of watersheds, resulting in a delayed barrier. Changes in hydrology of streams can be natural or can result from watershed-related activities such as logging, road construction, paving, or fires. These factors can cause a passable culvert to become a barrier once streambed scour occurs below the culvert. In recognition of this, the Washington State Legislature directed the former Department of Fisheries (now the Department of Fish and Wildlife) and the Washington State Department of Transportation to cooperate in the inventory and correction of salmon and trout migration barriers at state highway road culverts in the 1991-1993 and 1993-1995 bienniums.

A common misconception is that only adult salmonids are affected by culvert barriers, as they return from the ocean to native rivers and streams to spawn. Recent life history studies on salmonids reveal that culverts can also limit juvenile production by blocking them from important rearing areas. Research indicates the upstream movement of young salmonids during the winter months into areas of low velocity such as ponds, swamps, and marshes, often referred to as off-channel habitat. Young salmonids cannot attain the swimming speeds of adults and are easily blocked from these areas by improperly placed culverts. It is also a common misconception that streams which dry in the summer have no value to salmonids; this is also not the case. Chum, pink, and sockeye salmon use these areas for spawning, and juvenile coho salmon or chinook salmon for rearing during high-flow months.

WDF / WDW / WSDOT Memorandum of Understanding (GC 9058)

On December 27, 1990, final signatures were obtained for the interagency Memorandum of Understanding (MOU) GC 9058 (Appendix III) among the Washington State Departments of Fisheries, Wildlife, and Transportation concerning compliance with the Hydraulic Code (RCW 75.20.100 and Chapter 220-110 WAC) (Appendix I). Its purpose was to provide a mutual understanding among the participating agencies of procedures and standards for the application and acquisition of Hydraulic Project Approvals (HPA). Within the agreement is the requirement that WSDOT apply for the HPA to WDW or WDF for all instream projects, and for WDF or WDW to provide a timely response so road projects can proceed.

The MOU defined key words that frequent negotiations concerning fish migration barriers: enhancement, emergency, fish passage barrier, hydraulic project, mitigation, and transportation project. This MOU requires annual meetings between agencies in advance of construction dates where plans for new road construction or maintenance and potential wildlife or fisheries impacts can be addressed. Other items addressed in this MOU are maintenance guidelines for dealing with emergencies, needed training, resolution of concerns, and MOU duration. Finally, this MOU includes an Appendix outlining fish passage guidelines to be administered at future road culvert construction or maintenance sites.

WDF / WSDOT State Interagency Agreement For Fish Passage Inventory and Barrier Removal (GC 9392)

In 1991, the Legislature directed WSDOT to correct six fish barriers during the 1991-93 biennium. To further facilitate this mandate and locate other fish passage problems at state highways in Washington, WDF and WSDOT entered into a specific State Interagency Agreement to perform a fish passage inventory statewide and work collectively in planning projects and developing agreements to remove fish barriers at WSDOT culverts (Appendix II). This agreement commenced December 6, 1991, and provided the initial funding for both the newly organized fish passage inventory section in WDF and the correction of fish passage problems. Amounts allocated for inventory and correction were $105,000 and $280,000, respectively, for the biennium.

WDFW / WSDOT Memorandum of Understanding Inventory and Barrier Removal

On June 24, 1993, WSDOT, and the former WDF entered into an agreement (WDF #10-000030) to proceed with work outlined in previous agreements GC 9058 and GC 9392 (Appendix IV). The agreement provides funding for statewide inventory of fish passage barriers on WSDOT rights-of-way and removal of barriers independent of highway construction projects. WSDOT agreed to provide funding in the maximum amount of $730,000 to correct barriers identified through the inventory process (refer to Table I for the Budget / Function summary for the WSDOT / WDFW Fish Passage Inventory). Further, it provided $380,000 to continue inventory activities, with funding by the 1993 legislature.

ROAD PROJECT AND BARRIER REMOVAL PLANNING

During the 1993-95 biennium, it was recognized that long-term planning between WSDOT and WDFW should include not only funding for dedicated, independent fish passage projects, but also

- close communication and coordination between the two agencies
- identification and correction of barriers in conjunction with road work, and
- long-term commitment by the legislature

This became apparent when it was estimated that it would take over 100 years to correct all barriers at state highway culverts with independent fish passage projects alone. Alternatively, a carefully designed blend of this effort with fish passage work on mobility and safety road projects could reduce this time span to roughly two to three decades. This improves cost efficiency because mobilization and some work efforts at the culvert sites would not have to be duplicated and because benefits of restored fish production would not be delayed nearly as long. In fact, it has been estimated that every dollar spent on fish passage work will return a minimum of four dollars in fish benefits, even when not considering nonconsumptive values. This is particularly important for those fish stocks that are depressed to the point of potential listing under the Endangered Species Act. Obviously, correction of a problem to avoid such listing would circumvent the large recovery costs.

These concepts have been embraced by the two agencies, as reflected in the sharing of information concerning anticipated road work and fish passage barriers. Corresponding budget request packages to implement this approach have been agreed to by the agencies and submitted for legislative approval. The end result will be a process incorporating accelerated correction for high-priority barriers and organized, efficient correction of the remainder of barriers.

Phase I - Search

The search for barrier culverts was conducted by driving each state highway and stopping at every stream crossing. Bridges were assumed passable and not evaluated. Streams were located and identified by name and/or WRIA # (Water Resource Inventory Area #) using the WDF Catalog of Washington Streams and Salmon Utilization and a DeLorme Atlas of Washington State. Stream crossings were also identified by highway mile. After identification of the stream crossing, data on the culvert were collected using a WDFW / WSDOT Culvert Report form (Appendix VI). If the culvert appeared 100% passable to salmonids, data was collected only on its size and location. The passability estimate represents the percentage of fish expected to pass, of those that approach the culvert and require passage. Passability varies with flows, species, and tidal influence. If the culvert posed a passage problem to salmonids, a passability estimate was made and more detailed information was collected. This information included the slope and length of the culvert, the dimensions of the plunge pool, mean annual precipitation, substrate composition, and inlet information, as well as other data[1]. A photo was also taken of each barrier culvert. Culverts in local drainage ditches or those on streams with natural barriers (high gradient, waterfalls) located immediately up- or downstream of the highway were not evaluated; in most of these cases, the stream name and culvert size information was collected, and a code of NA (no access up to the culvert) or NG (no habitat gain above the culvert) was noted in place of a passability estimate. The decision whether or not to evaluate a culvert was made by the inventory team at the site.

Following the inspection of culverts, a prioritized list of barrier culvert sites needing further evaluation was developed for each District. The sites were prioritized using the passability, basin area, habitat quality, feasibility of construction, and species estimates obtained during the culvert evaluation. Fish presence verification, downstream passability, and habitat measurement proceed according to this listing, beginning with those streams highest in priority. Therefore, the first streams investigated are those with the highest potential benefit to fish production.

Phase II - Fish Presence / Downstream Passability Verification

To ensure that barrier correction projects will not be undertaken in areas which are not accessible to fish, the second phase of the inventory entails verification of fish presence in each stream on which a barrier culvert has been found, along with downstream surveying to determine if salmonids have access to each barrier culvert[2]. Species present are identified using information from WDFW Regional Habitat Program Managers and Area Habitat Biologists, local biologists and residents, the Catalog of Washington Streams and Salmon Utilization, the WDFW Spawner Survey database, and any other available information. Species may also be identified by electroshocking the stream using a portable backpack electrofisher.

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[1] The culvert form has undergone several changes since the Fish Passage inventory began. These changes include the addition of several pieces of information about barrier culverts, including: Depleted Stock and Cost Codes (Priority Index, p.11); Habitat Quality (ranked 1-10); Feasibility (ranked 1-10); and Road Fill Height / Ease of Access (ranked 1-10) (Appendix VI).

[2] Areas not accessible to anadromous fish may receive attention in the future, since non-anadromous fish also benefit from increased habitat availability.

Downstream verification of passage entails walking the stream from the barrier culvert to the mouth. Any impediments to salmonid passage are documented. Culverts with natural barriers such as falls or barrier cascades present downstream are generally not investigated in more detail as potential projects (at some point in the future, after resolution of higher-priority projects, they may be given further consideration). If a resolvable artificial barrier is located downstream, the stream is surveyed.

Phase III - Habitat Measurement (Physical Surveys)
Once downstream fish passage has been verified, measurement of the amount of fish habitat blocked by each impassable culvert is conducted. Physical habitat surveys estimate the amounts of spawning and rearing habitat upstream of the culvert in square meters (m^2). The habitat values are components of the Priority Index model, which is used for prioritization of potential projects (Priority Index, p.11). Habitat evaluation and measurement begin at the barrier, and proceed upstream. In addition to measuring the length of usable stream above the culvert, surveys divide the stream into habitat types: pools, riffles, rapids and ponds. This is done by sampling 30-meter portions every 161 meters (one-tenth mile) more intensively (60-meter portions every 322 meters in streams greater than one mile in length). Within sample areas, habitat types (riffle, pool, rapid and pond) are delineated and measured; streambed substrate composition (percentage of boulder, rubble, gravel and sand) within each type is estimated; and the stream gradient is measured. The samples result in an estimated ratio between habitat types which is then applied to the total length of the stream to obtain total riffle, pool, rapid and pond areas. These areas are then used to calculate spawning and rearing areas (see below). Any artificial barriers to salmonid passage are also documented. Measurement of habitat proceeds upstream from the barrier culvert until a natural barrier is reached, the stream is too small for salmonid use, or gradients consistently exceed seven percent.

The methods for both measurement and calculation of the amount of rearing and spawning habitat potentially available upstream of barrier culverts have undergone major changes during the 1993-1995 biennium. Revision of the existing methodology (Legislative Report, Biennium 1991-1993, Appendix D) began in June 1993. The revised methodology is shown in Appendix VII. One major revision incorporated is the breaking of the stream into discrete reaches, defined by gradient, tributary junctions, and other major morphological changes. This results in the grouping of similar lengths of stream into the same reach.

Changes have also been made in spawning and rearing habitat area calculations. In the previous survey format, spawning area was defined as total riffle area. However, since spawning occurs mainly in late fall/early winter, when flows are at or near Ordinary High Water, and habitat types other than riffles may be used for spawning, this method can result in an underestimation of spawning area. The revised physical survey format defines spawning area as the sum of the areas of each habitat type at Ordinary High Water, multiplied by the habitat type's gravel percentage. The Ordinary High Water line is defined as the point where "the presence and action of waters are so common and usual and so long continued in ordinary years, as to mark upon the soil or vegetation a character distinct from that of the abutting upland" (WAC 220-110-020, 1994). Widths at Ordinary High Water are determined during the survey using the bank vegetation line, and other hydrologic evidence. Spawning area is then further multiplied by a Habitat Quality Modifier, which

LIMITING FACTOR - If a habitat quality modifier other than 1 is assigned to a reach indicate why in this space. A simple note will suffice (dairy waste, unstable bed, lacking riparian vegetation, lacking in stream cover, irrigation return water, stream dry, high summer temperatures etc.

SURVEY ALL POTENTIAL HABITAT ABOVE A BARRIER - We will eliminate the category "immediate habitat" and call all habitat above a barrier potential habitat. This will include habitat above secondary barriers upstream of subject barrier provided the barrier has a reasonable potential for correction. When secondary barriers are encountered their location should be entered into the "multiple barriers" space in your field data notebook as distance in meters above the primary barrier. This may be directly tied to the data base via the unresolved fish passage problem identification report which you are currently completing at each man made barrier located.

1) **Stream length**

a) A belt chain measuring in meters and using a 3 strand, biodegradable thread is worn, and the stream is walked from the downstream end of the survey area.

b) To determine total potential habitat available above a barrier, the survey is continued to a point when the gradient consistently exceeds 7.0 % for a distance of at least one tenth of a mile or an anadromous barrier is reached.

c) **MULTIPLE BARRIERS** Frequently, additional man made or temporary (beaver dam, log jam) barriers exist which must be corrected to realize the potential habitat gain above the primary barrier. In this case, note the river mile of each additional barrier in the "multiple barrier" space on your survey form and identify your method of river mile identification (chain belt, stream catalogue, aerial photo, USGS quadrangle).

d) A fish passage barrier identification form should be filled out and submitted for each man made barrier encountered.

e) The multiple barrier river mile locations will appear as an additional field in our fish passage database.

2) **Sample Frequency**

a) Where the survey is predicted to be over 1.0 mile long, sample sections are 60 meters in length and taken at the beginning of each 0.2 mile (322 meters) section of stream. b) Where the survey is predicted to be under 1.0 mile long, sample sections are 30 meters in length and taken at the beginning of each 0.1 mile (161 meters) section of stream. Note: Depending upon the location of the end of the survey, the rate of sampling calculates out to be no less than 18.6% of the total stream length surveyed.

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FISH PASSAGE PROGRAM

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
FISH PASSAGE BARRIER REMOVAL PROGRAM

Progress Performance Report

For

Fish Passage Inventory, Corrections and Project Evaluation

March 31, 1998

Submitted By:

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Washington Department of Fish and Wildlife
Lands and Restoration Services Program

Salmonid Screening, Habitat Enhancement and Restoration (SSHEAR) Division

Cause No. C70-9013, Sub. 01-1
Plaintiffs Exhibit AT-055

Introduction

Inventory and correction of fish passage barriers associated with roadways and other structures is a growing priority for those who manage Washington's streams, lakes, and wetlands. Department of Fish and Wildlife, tribes, and private organizations have recently assessed fish passage at many culverts under state highways, county roads, and private driveways. As a result of these assessments, the difficulties salmonids face in accessing habitat once part of their historical range has become more apparent. The results of recent inventories in Washington estimate salmonids are currently blocked by barrier culverts numbering in the thousands.

This recurrent problem can be corrected cost effectively in most cases. In recognition of this, the Washington State Legislature, the Washington Department of Fish and Wildlife (WDFW) and the Washington Department of Transportation (WSDOT) have been cooperatively working to inventory, assess, evaluate, and correct culvert barriers located on stream crossings under state highways. (see Appendix I, for a summary of the WSDOT Barrier Culvert database).

WSDOT plans to address all the barriers with their 20 year System Plan. The 20 year System Plan is a three pronged approach. It first designates highest priority fish passage barriers and systematically removes these barriers utilizing Environmental Retrofit Program funding. Secondly, as Transportation Projects are programmed requiring hydraulics permits, additional fish passage barriers are removed. This approach leads to a decrease in barrier removal costs by combining projects and sharing the expense of mobilized equipment. And third, some fish barriers are removed as a result of normal WSDOT's maintenance activities.

Estimates of the number of barriers requiring correction have recently expanded to include stream reaches that benefit resident game fish species and habitat associated with stream gradients up to 20% slope. These changes were required to comply with current fish passage and stream typing statutes. The 20 year System Plan should be reviewed and updated to reflect these changes.

Evaluation of fish passage projects has also been given high priority in the WSDOT inventory and barrier correction. This insures completed fishways are functioning properly and providing durable and efficient fish passage that can increase fish production. To facilitate this a three-level culvert and fish use evaluation has been designed and implemented. Results are presented in Appendix II, Appendix III, and Appendix IV.

Documentation of corrected barriers, long term planning for future corrections, methodologies, and results of evaluations are the topics of this progress report.

Also outlined in this report is a six year WSDOT planning process to facilitate long term funding and correction of high priority barriers.

Project Evaluation for Dedicated Funding Projects, Before and After Barrier Removal

Working with recommendations and funding support from WSDOT, WDFW has developed a three level culvert and fish use evaluation procedure to be done on planned and completed dedicated funding projects. It is intended to determine utilization of the newly accessible habitat and remedy problems associated with fish production such as chronic low escapements, habitat degradation, or non point watershed problems. Level 1 is the initial evaluation to determine fish use prior to a project and during the one year guarantee period following the barrier correction. Level 1 evaluation is funded by WSDOT and is done on all projects (see Appendix II and Appendix IV). Level 2, funded by WDFW, is designed to monitor and make appropriate recommendations on streams where utilization of target species could not be documented (see Appendix III and Appendix IV). This may include electro-fishing and/or spawner surveys lasting as long as two brood cycles (e.g. six years for coho). Level 3 evaluation is geared to measure the actual increase in production realized on a small number of selected streams over a long term.

It should be noted that Level 1 and Level 2 project evaluations are not designed to estimate resident or anadromous population size in target streams. Further, it is not an escapement estimate, and is not an enumeration of smolt production. Procedures such as these are site specific, detailed, and expensive salmonid studies beyond the current scope of this project. The evaluations are intended to identify the presence or absence of target species in a stream where fish passage is being scrutinized.

Purpose and Intent

WDFW evaluates completed projects to assure they are successful in achieving free and unobstructed fish passage. After constructing a fish passage project with dedicated funding a one year guarantee period allows for observation of conditions during winter flows when fish typically use the facility. We observe hydraulic conditions in the fishway and foot survey stream reaches above and below the project for adult spawners and/ or evidence of juvenile use (electro-fishing). During this time, if deficiencies in passability of the structure, or deficiencies that could reduce the normal expected project life are detected, plans are made to effect corrections. We have found that utilization of newly opened habitat is heavily influenced by adult spawner run strength which varies annually in response to an entire matrix of environmental and fish harvest conditions. Many species of salmonids such as coho and steelhead seek out cover and effectively avoid detection. These species also tend to disperse widely in stream systems making it difficult to observe them when numbers are low. In some cases, fish production in quality streams may be low due to many factors - including existence of the initial barrier culvert, low escapements, habitat problems in the target stream unrelated to the barrier, and inadequate time for fish production to cycle up on a stream blocked by a barrier culvert for many decades.

On Site Project inspection

An on site review consists of physical assessment by project team members to confirm that the new fishway is functioning as designed to freely pass fish. Any structural/fish passage deficiencies are identified and corrected during this time period which begins immediately after project construction and ends on December 31 the year following. All work within the first year after project inspection is classified as a Level 1 evaluation.

Adult Spawner Surveys

The primary objective for adult spawner surveys is to determine target species presence or absence above and below a newly completed WSDOT fish passage installation or to evaluate a WSDOT pre-project barrier. Spawner surveys are conducted for 500 meters above and below the project, or to the confluence with a larger body of water downstream, or to a natural barrier upstream. A belt chain is used to measure 500 meters upstream and downstream where surveyors tape is placed to mark the end of the survey area. Survey results are then recorded and copies forwarded to the WDFW Fish Management Program. If the reaches above and below the fishway are determined to be transport waters and local biologists indicate the likelihood of spawners elsewhere, the team relocates the survey accordingly. Pre- and post-project spawner surveys must be done (see Appendix II and Appendix III for results of adult spawner surveys).

Electro-fishing

Electro-fishing is primarily used to determine target species absence or presence above and below a newly completed WSDOT fish passage installation or to analyze a WSDOT barrier. It is intended to trigger appropriate action if for any reason fish are not responding to the barrier correction. If a project shows no fish use during the Level 1 evaluation (one year following completion of the project), the Level 2 evaluation begins a plan for recovery of target stocks so low in numbers that a practical, reasonable expectation for natural colonization is limited. This may continue for a period of six years depending on recovery of target species.

Juvenile electro-fishing and/or minnow trapping is used to determine target species presence if adult surveys indicate fish were found in extremely low numbers. An individual watershed approach is taken and problems associated with that specific watershed discussed by the SSHEAR evaluation team. An approach to fish recovery, if needed, is then prescribed for the specific stream being evaluated.

Generally, electro-fishing is done without block nets and within the first three pools or riffles above and below the culvert. Exceptions are made in those cases where known, high quality habitats that are more likely to hold juvenile fish, exist in areas other than this reach.

The primary result of juvenile studies is to verify fish use in streams where adult surveys have not verified adult use. These data, along with physical habitat information, are used by the

with the stream in question are determined by the evaluation team. Details on the approach, level, intensity, and location of the evaluation are determined by the team.

Results and Discussion

In streams evaluated, fish showed a wide variety of responses to new fish passage facilities. It is important to note some fish runs are extremely low in Washington, and will take time, possible further enhancement effort, and key habitat and harvest management decisions for fish populations to rebuild. As expected, some newly opened habitats were immediately taken advantage of by fish populations, while others showed no measured recovery. Adult surveys, the primary evaluation technique, revealed 14 of the 21 new fishways had upstream escapement after project completion. Of the 13 fishways where electro-fishing was conducted, 6 were determined to have a significant population of target species above the new fishway, 7 did not and were determined to require further monitoring.

Streams not being utilized will be re-sampled for fish presence in subsequent brood years. If fish populations are not recovering, further steps will be taken to rebuild the depressed stock. Steps might include further analysis of upstream or downstream barriers, selective debris removal, fencing, beaver dam notching, repair of other human-made barriers in the system, or channel roughening in bedrock sections. The primary method reestablishment of extirpated fish stocks will be supplementation (fry or fingerling planting). A recommendation to pursue recovery using supplementation will be made to the WDFW Fish Management Program, if the Level 2 evaluation process shows a fish stock is not recovering on its own.

Six Year Planning Document

At the request of WSDOT, WDFW has prepared a prioritized list of projects to be implemented over the next three biennia. This list is the result of further project evaluation, development of on-site engineering plan, conceptual designs, and budgeting. The WSDOT fish passage project six year plan is included in Appendix VI.

2007-2026 Budget Update

Paula Hammond
Secretary

David Dye
Deputy Secretary

Steve Reinmuth
Chief of Staff

Tim Smith
Manager
Systems Analysis and Program Development

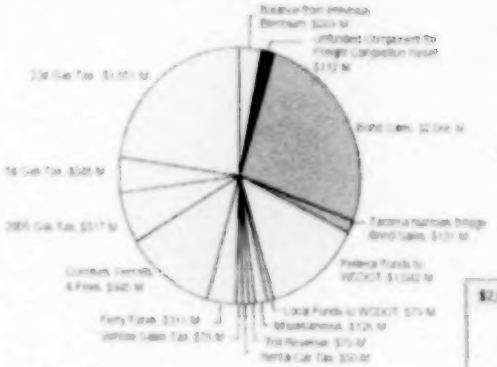
WSDOT Statewide Construction Engineers Meeting
29 May 2008

Washington State Department of Transportation

Cause No. C70-9213, Sub. 01-1
Plaintiffs' Exhibit **AT-100**

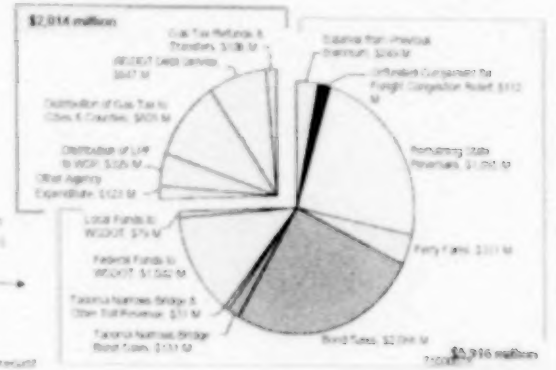
2007 - 2009 Enacted Budget

Transportation Revenues and Funds Collected by the State 2007-09 • $7.9 billion



Funding for transportation comes from a variety of sources, including fuel taxes, licenses, permits, and fees, ferry fares and concessions, rental car taxes, and miscellaneous revenues like interest earnings. A portion of the budget is also funded from bond sales, federal funds, and local funds and remaining cash balances from previous years.

Distribution of State Collected Transportation Revenues and Funds 2007-09 • $2.0 B to other agencies and governments, $5.9 B retained by WSDOT



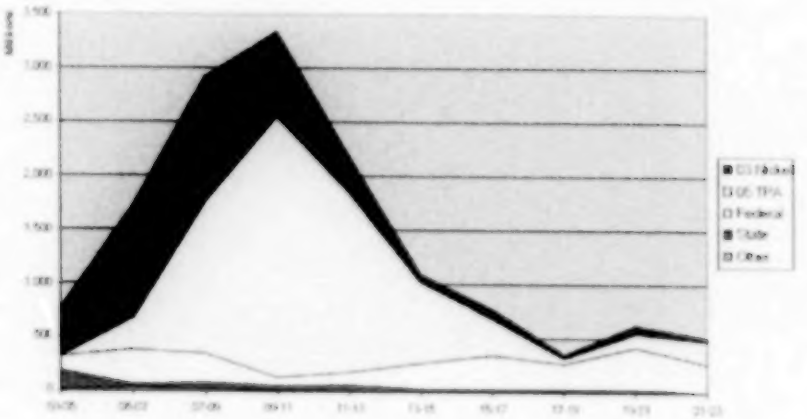
Out of the total collected funds, distributions are made to various agencies and governments. During the 2007-2009 biennium, of the estimated $7,930 million in transportation funds collected, WSDOT retains approximately $5,916 million. The remaining $2,014 million is distributed to cities and counties, the Washington State Patrol, the Office of the State Treasurer (to pay debt service), and other agencies.

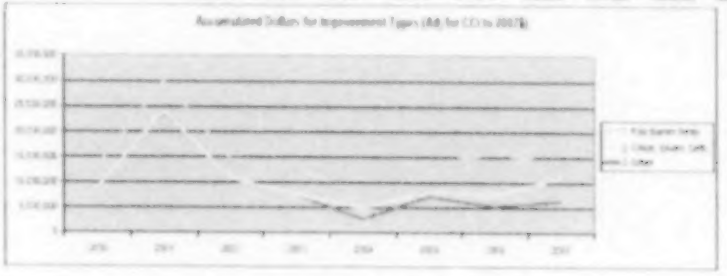
Revenue projections based on the June 2007 Transportation Revenue Forecast

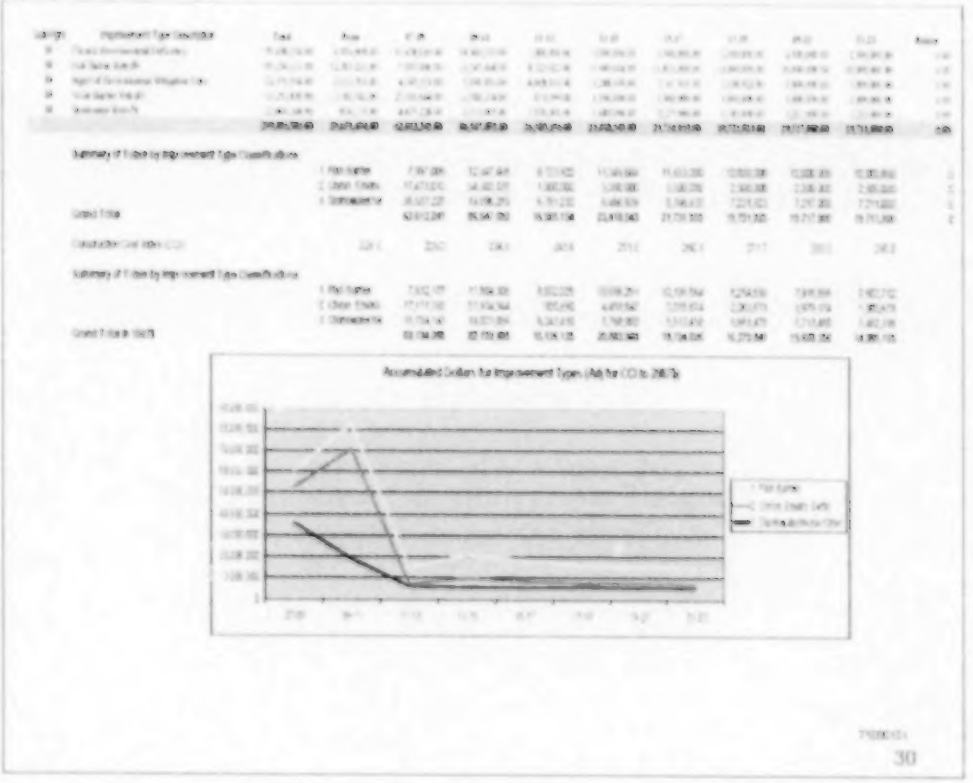
TPA & Nickel Revenue Package Projects

20-year Investment

Governor Proposed 2008 Supplemental Budget Request

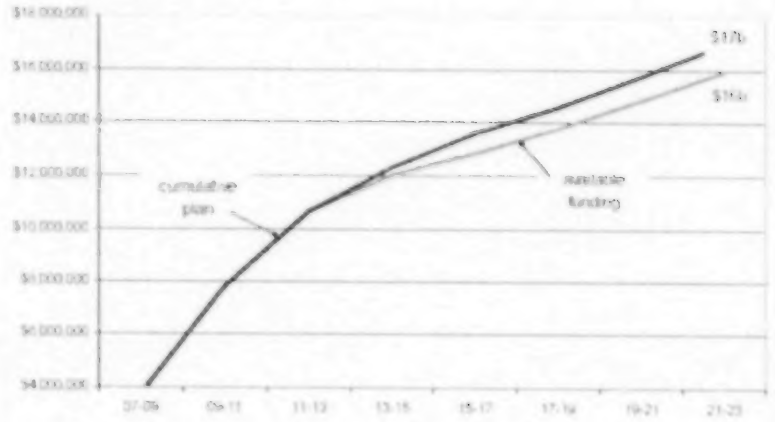


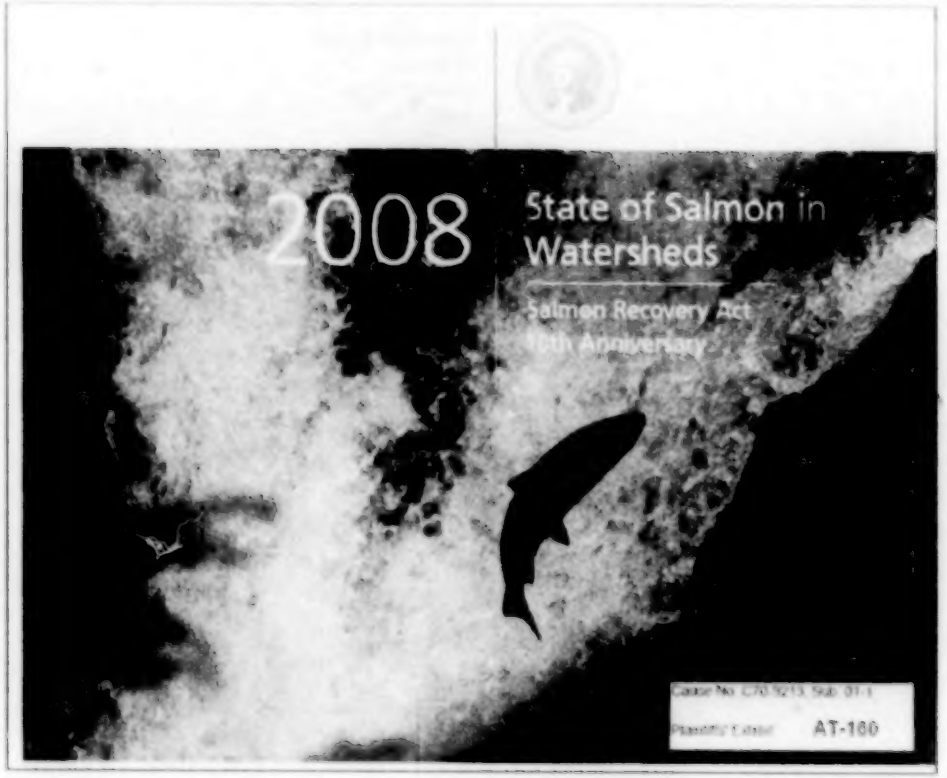



Accumulated Dollars for Improvement Types (All for CO to 2007)

Highway Const. Program Plan vs. Available Funding

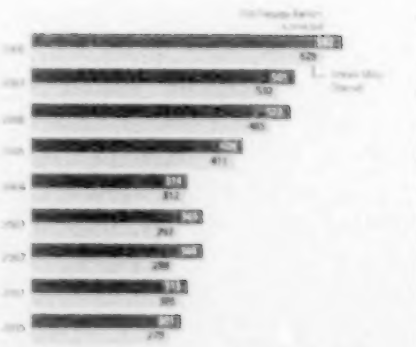
Governors proposed 2008 Supplemental Request

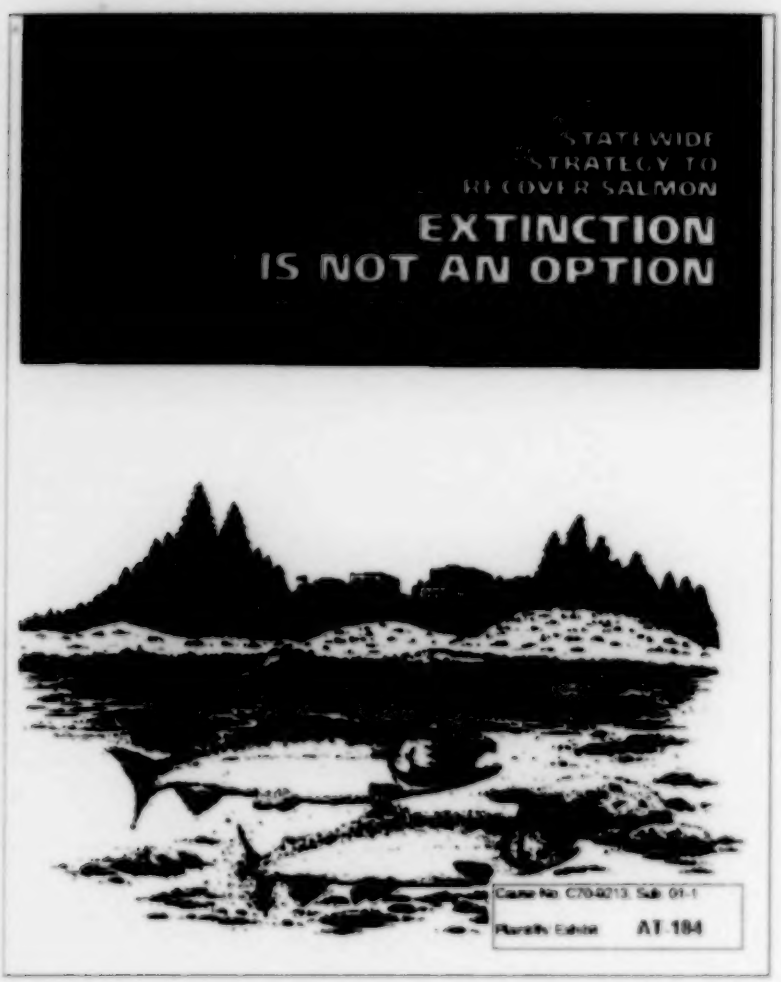



2008
State of Salmon in Watersheds
Salmon Recovery Act
10th Anniversary
AT-160

Water Quality in Watersheds

Fish Passage Barriers Corrected and Stream Miles Opened




STATEWIDE
STRATEGY TO
RECOVER SALMON
EXTINCTION
IS NOT AN OPTION
Case No. C704213, Sub. 01-1
Plaintiffs Exhibit AT-184

I. A Sense of Urgency

Overview

Salmon, steelhead and trout[1] have been, and continue to be, a critical part of Washington's history, culture, economy and recreational enjoyment. They are a basic and important natural resource, a symbol of the natural beauty of the state. Salmon are also valued for subsistence, for nutritional health and for the spiritual well-being of tribal people.

Salmon have been vital to the sport and commercial fishing industry. Fishing provides jobs, supports businesses, and provides quality recreational experiences for a significant number of families from Washington, around the country and the world. For example, the U.S. Department of Commerce estimates that in 1996 sport fishing contributed more than $704 million to Washington's economy. The decline of salmon is affecting families, communities, the state and the northwest region as a whole. The loss of salmon also means the loss of revenue for tribal economies historically dependent on salmon.

Much has been written on salmon biology and their environmental needs and the increasingly adverse impacts on salmon populations and habitats caused by human activities. (See Chapter VII C for list of references.) Elsewhere in this document you'll find basic information on salmon problems and the potential consequences of the listing of the salmon as endangered or threatened under the federal Endangered Species Act. This chapter conveys the importance of taking actions now by preventing further harm to salmon populations and habitats, and by implementing long-term conservation measures and programs to reverse the decline and recover the salmon.

An Indicator of Quality of Life

Salmon life history takes them through many ecosystems - riverine to estuarine to marine and back again. Salmon are important indicators of the aquatic and riparian ecosystems they inhabit. The well-being of salmon is also an indicator of the health of many other species, as well as an indicator of the environmental quality and health of ecosystems. This includes indications of health for human uses, from drinking water to swimming.

Sustained salmon productivity can be maintained only if diverse biological communities and genetic diversity of salmon are maintained, and watersheds and ecosystems are healthy and properly functioning. The basic needs for salmon spawning, rearing and migration are:

- adequate amounts of cool, clean and well-oxygenated freshwater;
- fully functioning riparian corridors with large woody debris in the stream channel.

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[1] For the purposes of the Strategy, the term "salmon" will be used to refer to all species of salmon, steelhead, trout and char native to Washington State.

N-00002476

- high quality estuarine, nearshore and marine habitats;
- adequate supply of food, cover and refuge from predators;
- unimpeded access to and from freshwater.

Unfortunately, human activities have altered most, if not all, of these basic needs. Salmon are battling for survival, with their populations and habitats either at critical levels or at risk. Many wild salmon stocks have been significantly depleted and are being driven to or near extinction.

A Symbol in Decline

Salmon populations were historically numerous and abundant in the rivers of the state and along the Pacific Coast. The Columbia River with 1,210 miles was the greatest producer of wild salmon in the nation, with 10 million to 16 million salmon produced annually. Salmon runs now range from 3.2 million to less than a million, 75% of which are from hatcheries.

Fluctuations in the abundance of salmon have been observed for several decades. While some of the declines are normal and reflect the natural variation in ocean, freshwater and estuarine environments, human activities have severely accelerated the rate of decline of several salmon populations. For more than two decades scientists and fisheries experts have warned of the decline of salmon and the degradation of their ecosystems. Various stock status reviews have noted the decline of salmon in Washington. For example, the 1993 Salmon and Steelhead Stock Inventory (SASSI) stated that less than 50% of Washington's salmon stocks were in a healthy state. As defined in SASSI, a healthy stock is one "experiencing production levels consistent with its available habitat and within the natural variations in survival for the stock." Generally, coastal populations currently tend to be better off than populations inhabiting interior drainages. Losses of stocks in inland areas of the Columbia River system have occurred over a greater percentage of their range than species primarily limited to coastal rivers.

Stress Factors

Declines of wild salmon closely parallel the settlement of the Pacific Northwest by Euro-Americans, starting in the early 1800s. For more than a century, people degraded and destroyed streams, rivers and estuaries by farming, logging and developing land and water; over-fished; introduced non-native species; and substituted hatchery-produced fish for wild fish.

Unfavorable natural conditions contributed additional stress. It is important to note that the effects of natural disturbances (e.g., droughts, fires, volcanic eruptions) are quite different from the effects of human-caused factors. Natural disturbances are usually relatively short in duration and occur on an infrequent basis. While human factors may contribute minimal impacts individually, the number, magnitude, duration, and cumulative impacts since settlement combine to form the primary cause of the decline of numerous salmonid stocks.

The degradation or modification of habitat conditions by human activities influences salmon growth, reproduction, migration, demand for food and other biological and physiological functions. For example, alteration of stream flows can interfere with upstream migration of adults, and reduce or eliminate stream rearing and spawning habitats. Many of the human impacts are interrelated and

are cumulative in their effect. For example, a heavily over-fished stock has fewer spawners and is far less able to adapt to changing habitat conditions related to land use practices, such as urbanization or logging. Dams that block access to large areas of upstream habitat may fragment and reduce the genetic and biological diversity of a species in a basin to the extent that it may be unable to withstand further impacts from fishing, poor land use practices or interbreeding with hatchery fish.

Human factors have taken place over a long period of time and have affected particular salmon stocks or watersheds to varying degrees. Future population growth - projected by the Office of Financial Management (OFM) to increase by 36% between now and 2020 - and its associated continued urbanization and land disturbances will more likely expand the geographical extent and intensity of habitat loss.

These human factors are addressed in the Statewide Strategy to Recover Salmon in terms of the "four H's" - habitat, hydropower, harvest and hatcheries. By keeping the strategy focused on key human activities and actions (e.g., forest practices, agricultural practices, fish harvest, etc.) we hope to focus attention on the effects of those activities and the changes we need to make to protect and restore salmon and watershed health.

ESA Listings of Salmon: Difficult Issue for All

The protection of salmon populations and habitat occurs under several federal and state laws. Unfortunately, the decline and continuing losses of salmon stocks, as well as diminished abundance and genetic diversity, is evidence that some of the laws are either inadequate or not fully implemented and enforced. The declining status of many salmon species and populations has resulted in their listing as either endangered or threatened under the federal Endangered Species Act (ESA).

The listings of anadromous fish present new and difficult issues for the state, particularly in the heavily populated Puget Sound area, and there is little historical precedence or experiences upon which to draw. Now, or in the very near future, key regulatory mechanisms of the ESA, such as prohibition against taking or harming a listed species, (which includes significant habitat modification or degradation), may be triggered. This will require all of us to change our behavior, from how we water our lawns to how we grant approval to new projects.

In summary, salmon play a critical role in our economy and way of life. But they are facing an uphill battle for survival. No specific factor is solely responsible for the salmon problem. Salmon have evolved to withstand natural disturbances such as floods, drought, predation and ocean cycles. However, these disturbances are often accelerated by human factors. Given that the stresses to fish populations posed by low points in natural ocean productivity cycles can occur over a decade or more, continually shrinking freshwater habitat presents very serious risks. In addition, many human factors contribute directly to the salmon problem, such as forest and agricultural practices, water use and development, intensive and continued urbanization, fish harvest and hatcheries. The listings across 75% of the state are cause for great concern, and will have direct consequences for any actions taken that might harm the species or its habitat.

Update on Anadromous Fish Passage Culvert Barriers on Forest Service Roads within the US v. Washington Case Area

Bob Metzger
Aquatic Program Manger
Olympic National Forest, USDA Forest Service
July 1, 2009

Fish passage barrier inventories were initiated by National Forests throughout the Pacific Northwest Region in 2000 to collect initial information on potential culvert fish passage barriers on Forest Service roads. As of 2002, preliminary results identified 65 culverts within the case area that blocked access to ¼ mile or more of anadromous habitat. These culvert barriers blocked access to a total of 35.2 miles of anadromous habitat. Additional inventories since 2002 have provided more detailed information about potential fish barrier culverts within the case area and have caused some initial barriers to be deleted and some other sites to be added.

The Forest Service has implemented an aggressive program to correct culvert fish passage barriers throughout the Pacific Northwest Region. New crossing structures are designed to meet stream simulation standards to provide passage for all species and all life stages of fish by Regional direction. The 2005 MOU between WDFW and the Forest Service Regarding Hydraulic Projects Conducted by Forest Service in Washington State also requires the use of the stream simulation approach for new culverts on fish-bearing streams. Site investigation and selection of appropriate stream simulation designs are guided by the 2008 Forest Service document *Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings*.

Where road segments that contain the culvert fish passage barriers are no longer needed, fish passage barriers are corrected by removing the crossings altogether and decommissioning the roads. In some cases, storms have washed out the barrier culverts and restored access for anadromous fish. Fish passage structures will be installed at these sites if the flood damage is repaired.

Fish passage has been restored at 36 anadromous culvert fish passage barriers on Forest Service roads within the case area since 2002. Completed culvert barrier correction projects are reported annually to WDFW and to the US Army Corps of Engineers as part of our Hydraulic Projects MOU and Corps 404 Permit RGP for Forest Service Fish Projects in Washington State, respectively.

There are currently 27 culvert fish passage barriers within the case area that block more than ¼ mile of anadromous habitat. These culverts block access to a total of 19.3 miles of anadromous habitat.

Table 1. Anadromous Culvert Fish Passage Barriers within case area

Forest	# Culvert Barriers	Habitat Blocked	
Olympic	5	8.7 miles	
Mt Baker-Snoqualmie	22	9.6 miles	
Gifford Pinchot	0	0	No anadromous culverts within case area
Okanogan-Wenatchee	0	0	No fish culverts within case area
Total	27	19.3 miles	

At least three anadromous culvert barrier correction projects have been funded and will be implemented within the case area in FY 2009 or 2010. Two anadromous barriers will be removed on the Olympic National Forest. One culvert will be corrected on the Mt. Baker- Snoqualmie National Forest. These projects will reestablish access to another 5.1 miles of anadromous habitat. Additional culvert barrier corrections are in the planning and design phases on both Forests and will be implemented as funding is available.

Design of Road Culverts for Fish Passage

2003

USFWMA/SUPP 002140

Design of Road Culverts for Fish Passage

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Guiding Principles for Water Crossings

1. Culverts result in permanent, direct loss of instream and riparian habitat.

2. Installation and maintenance of water crossings that confine or constrict the channel or floodplain will break ecological connectivity, alter channel processes and change adjacent channel character and shape by affecting the movement of debris, sediment, channel migration, flood waters and aquatic and terrestrial organisms.

3. Water crossings may create an entry point for road runoff pollutants.

4. Fish passage can be hindered or blocked at water crossings.

5. Water crossings increase the risk of damage to the downstream habitat due to water crossing failure.

6. Cumulative impacts and risks of water crossings can be avoided or minimized by consolidating water crossings, employing full-span bridges, by simulating a natural channel through culverts or removing water crossings. Access solutions that do not require water crossings are preferred.

It is our nature as human beings to live, work and recreate along and adjacent to waterways, whether freshwater or marine. Our lives and histories are inextricably linked to water. How we affect those waterways has long term survival consequences not only for fish and wildlife, but for humanity. The Aquatic Habitats Guidelines Program is intended to help balance man's need to protect life and livelihood with the need to protect and restore riparian habitat for fish, for wildlife and for ourselves.

Introduction

Design of Road Culverts for Fish Passage serves as a guide for property owners and engineers who are designing permanent road-crossing culverts to facilitate upstream fish migration. It provides guidance for projects involving new culvert construction as well as retrofitting or replacing existing culverts. The designer will need to have a working knowledge of hydraulic engineering, hydrology, and culvert structural engineering to accomplish an appropriate design.

Formal fish ladders may be required as a retrofit at some culvert sites to provide passage. The design of fish ladders is beyond the scope of this guideline, though there is a brief description of some basic design concepts included here. An engineer with expertise in fish passage should be consulted for additional assistance for the design of fish ladders.

Design of Road Culverts for Fish Passage lays out the consecutive design steps most likely to be required in a culvert project. A form describing the data needed for the design and its evaluation is provided in Appendix F, *Summary Forms for Fish-Passage Design Data*. Explanations and definitions of terms describing channel, hydrology and data requirements can also be found in Appendix F.

Before using this guideline, great care should be taken to determine whether a culvert is a suitable solution for providing fish passage at the particular site in question. Indeed, environmental circumstances other than fish passage may make it impossible to obtain a permit to install a culvert. The Washington Department of Fish and Wildlife prefers construction of a bridge over installation of a culvert in order to minimize risk of impacts to fish and habitat. Wherever a roadway crosses a stream, it creates some level of risk to fish passage, water quality or scientific aquatic or riparian habitats. Generally, the risks increase the more the roadway confines and constricts the channel and floodplain. Any and all alternatives should be investigated to minimize the number of sites where a roadway crosses a stream, including designing road alignments to avoid crossings, consolidating crossings and using temporary crossing structures for short-term needs.

Though this guideline focuses on fish passage, other habitat and ecological considerations are also required in the siting and design of road-crossing structures such as culverts. These considerations are essential to the protection of fish and habitat, and should be addressed first in the design of a road crossing. Requirements addressing these considerations are outlined in Chapter 1, *Habitat Issues at Road Crossings*. The Washington Department of Fish and Wildlife's Area Habitat Biologist in the area where your project is located is the first authority for Hydraulic Project Approval, so be sure to make contact early on for information on fish passage and other environmental issues that go beyond fish passage (see Appendix J, *Washington Department of Fish and Wildlife Contact Information*).

For information about the inventory of culverts or the prioritization of culvert barrier remedies, refer to the *Fish Passage Barrier Assessment and Prioritization Manual*, published by the Washington Department of Fish and Wildlife (1999).

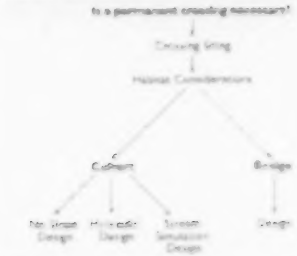
The design of new or retrofit culverts must be in compliance with Washington Department of Fish and Wildlife fish passage criteria as defined by WAC 220-110-070 (see Appendix B, *Washington Culvert Regulations*). The information contained in this publication is the most current guidance for construction and retrofit of culverts for fish passage in Washington State. Recommendations in this publication vary somewhat from WAC 220-110-070 but do not conflict with it. *Design of Road Culverts for Fish Passage* is intended to clarify the regulation and provide up-to-date guidance and application of the regulation across a broader range of fish passage projects, including steep culverts. These guidelines can be applied as provided for in WAC 220-110-012, "Modification of technical provisions." Information gathered, as well as concepts and guidance developed for this publication will be incorporated into any future review and update of WAC 220-110-070.

Chapter 1 – Habitat Issues at Road Crossings

The very presence of a culvert has an impact on stream habitat, even when fish are able to migrate through it successfully. These impacts are often associated with the culvert itself, but they can also be associated with the channel modifications necessary to install or retrofit a culvert intended to facilitate fish passage. Upstream and downstream hydraulic effects of the culvert can have an impact as well. There are, for example, often habitat losses associated with steepening a channel to achieve fish passage. What's more, though fish-passage criteria apply only to fish-bearing streams, other environmental factors apply at all crossings. For questions about habitat issues, contact the Washington Department of Fish and Wildlife's Area Habitat Biologist (see Appendix J, Washington Department of Fish and Wildlife Contact Information).

Because the impact to stream habitat can be significant, the best option for roadway design is to avoid or minimize the number of stream crossings needed. However, this is not always feasible, so other options must be considered that will allow the stream to cross the road. **Figure 1-1** presents a generalized approach to selecting road-crossing options. As you can see, it explores options other than permanent culverts and addresses habitat issues that may arise before considering the formal culvert design process.

Figure 1-1. Road Crossing Design Process



A generalized approach to selecting road-crossing options.

Once the culvert option has been identified, a number of concerns must be taken into account as design begins. These concerns may dictate the siting, sizing and design of culverts and/or fish passage improvements:

- direct habitat loss
- water quality
- upstream and downstream channel impacts
- ecological connectivity
- channel maintenance
- construction impacts, and
- risk of culvert failure.

Direct Habitat Loss

Salmonid habitat includes all areas of the aquatic environment where the fish spawn, grow, feed and migrate. Culvert installations require some magnitude of construction activity within the stream channel and the culvert itself replaces native streambed material and diversity with the culvert structure.

Spawning Habitat

Each species of salmon and trout requires specific spawning conditions related to the water velocity, depth, substrate size, gradient, accessibility and space. All salmonids require cool, clean water in which to spawn. Most salmonid spawning occurs in pool tailouts and runs. Spawning habitat can be lost or degraded by culvert installations in the following ways:

- Culvert placement in a spawning area replaces the natural gravel used for spawning with a pipe. This is a direct loss of spawning habitat.
- Culvert construction can require significant channel realignment, eliminating natural meanders, bends, spawning riffles and other diversity in the channel that serve as valuable habitat.
- Culverts shorten channels, leading to increased velocities and bed instability that reduce spawning opportunities and decrease egg survival.
- Riffles and grade bars immediately downstream of the culvert can be scoured if flow velocity is increased through the culvert. Gravel mobilization while eggs are incubating in redds nearby results in high egg mortality.

- Any release of sediment into the stream (not simply covering gravel with silt). In the case of culverts, sediment releases may be due to construction or due to a change in hydraulics caused by changes to the alignment, sizing or design of the culvert. Such damage can be avoided or at least minimized by correctly designing and implementing an effective erosion- and sediment-control plan and by timing the project to avoid critical stages in salmonid life cycles. Instream work windows vary among fish species and streams. Contact the Washington Department of Fish and Wildlife's Area Habitat Biologist for information on work windows (see Appendix J).

Rearing Habitat

Juvenile salmonids use almost all segments of the stream environment during some stage of their freshwater residence. Habitat usage is highly variable depending upon the species, life stage and time of year. Pools with large, woody debris are especially valuable habitat. Trees on the streambank also provide important habitat features, serving as cover and a source of insects and large woody material, both of which critical to rearing fish. Culvert construction can negatively impact rearing habitat in the following ways:

- There is a direct loss of rearing habitat when it is replaced with a pipe.
- Trees and woody debris at the culvert site must be removed to install the culvert, thus eliminating their beneficial effects on channel structure, function, stability and food production.
- Riparian vegetation must be removed from the streambank to make way for the culvert installation, and it is often removed for the entire right-of-way width as a regular maintenance activity.
- Any reduction in stream length is a reduction in usable rearing habitat. Culverts cut off natural bends, meanders, side channels and backwater channels, directly eliminating such habitat. Most side channels and backwater channels experience higher fish usage than the main stream channel, especially during winter flood flows, so the loss of such habitat can be especially harmful to fish survival.
- Culvert placement that lowers the natural water level of pools, ponds, backwaters or wetlands within or adjacent to the stream can significantly decrease valuable rearing habitat.

Loss of Food Production

Fish, like all other organisms, need food in order to survive, grow and reproduce. Juvenile salmonids feed on aquatic invertebrates and terrestrial insects that fall into the water. The food chain in the aquatic environment begins with the primary producers like algae and diatoms (periphyton), which require organic material and sunlight to fuel the photosynthetic process. The inside of a culvert is dark, and the absence of sunlight prohibits primary production. Benthic invertebrates like mayflies, stoneflies and caddis flies feed on the primary producers. Invertebrates require some of the same conditions as salmonids to thrive, including clean water and stable gravel. Reduction in the number of invertebrates means a reduction in an important food source for salmonids, which can reduce salmonid growth rates. Faster growth rates produce larger salmonids – a competitive advantage that increases their survival rate at sea.

Removal of riparian vegetation for culvert placement reduces organic debris such as leaves, wood, bark, flowers and fruit that enters the stream and fuels primary production. Terrestrial insects that drop from overhanging vegetation into the water are removed from the food base when the vegetation is lost.

Mitigation of Direct Habitat Losses

Complete replacement of habitat and channel length lost due to culvert installation can be difficult, if not impossible. Mitigation then becomes the next option. Mitigation for the impact of lost cover and pools might include adding diversity and habitat features such as woody debris to the channel in an appropriate location.

As mentioned earlier, placement of a culvert in a spawning area results in a direct loss of that habitat for fish, but invertebrates are also affected because they, too, thrive in gravel beds. Spawning habitat in most Pacific Northwest streams is not limited by the supply of gravel; it is limited by the structure and diversity of channel forms that sort and distribute bed material to create spawning and other habitats. The only effective means of preserving valuable spawning habitat in most cases is to avoid disturbing it in the first place.

In streams that are deficient in spawning gravel, a loss of spawning habitat might be mitigated off site by gravel supplementation. Several techniques might be used.

While it may be tempting to simply place new gravel over an existing streambed inside or outside of a culvert, it is normally not effective to do so in the short term. The new gravel is of course attractive to fish for spawning, but it is not stable.

enough for eggs to survive winter floods. It takes several high flows for gravel to be redistributed and settle into place before it can be valuable habitat.

Gravel supplementation should instead be done in a way that mimics natural gravel deposits such as pool tailouts or gravel bars. The downstream end of stable pools and stable riffles can be supplemented with a layer of gravel to mimic tailout deposits. Gravel can be placed upstream of streambed controls that are installed as part of the fish-passage project. A channel constriction made of mounds of gravel will, in the right circumstances, create a pool and a tailout. Gravel can also be supplied to a bankline to mimic a naturally eroding gravel bank. High stream flows will then efficiently redistribute the gravel to locations where it is most likely to remain stable.

It may seem reasonable to add a layer of gravel inside steeper culverts to mimic the streambed at either end. However, if the gravel layer is too thick, low water flows may not be able to rise above the gravel, and fish will not be able to swim through. This problem can be especially troublesome when there is no input of sediment from upstream to seal the gravels, such as when there is a wetland or pond immediately above the culvert or in spring-fed streams with stable hydrology.

Water Quality

To extend the life span of culverts in acidic water, they are sometimes treated with an asphalt coating. It is unknown what effect this may have on fish or invertebrates in the water. Until it can be shown that these type of treatments are not a risk to fish health they should not be used.

Quality and quantity of road stormwater runoff must be mitigated as deemed appropriate by the local jurisdiction or the Washington State Department of Ecology. In addition, all stormwater discharges into a stream must be designed to prevent scour during higher flows.

Upstream and Downstream Channel Impacts

Increased velocity from a culvert can erode downstream banks, leading to the need for bank protection. To reduce the likelihood of downstream erosion, flow velocity at the culvert exit should not exceed the pre-project channel velocity by more than 25 percent.

Undersized culverts create bed instability upstream. At high flows, the culvert creates a backwater, and bed material is deposited in the channel upstream. When receding flows, the bed and/or banks erode through or around the deposition. The result is either a chronically unstable channel bed or increased bank erosion and the need for bank clearing and protection. The culvert inlet should be designed to limit head loss to less than one foot for a 10-year flood. Less head loss may be necessary considering flood impacts.

The design process described in this guideline helps minimize these upstream and downstream impacts. Typically, this process determines the size and elevation of culverts such that velocities leaving the culvert will not be excessive. Sites with banks or beds susceptible to erosion may require special consideration.

A culvert placed in a stream with an actively migrating channel can result in an acceleration of the channel migration and a substantial maintenance effort to keep the channel at the culvert location. Channel migration is a natural geomorphic process, but upstream activities can accelerate it. Chapter 7, *Channel Profile*, discusses how to anticipate and address these impacts.

Ecological Connectivity

Ecological Connectivity is the capacity of a landscape to support the movement of organisms, materials or energy.[7] In terms of culvert design, it is the linkage of organisms and processes between upstream and downstream channel reaches. The health of fish populations, therefore relies on the health of their ecosystems, which include migrations and processes that depend on that connectivity. Biotic linkages might include upstream and/or downstream movement of mammals and birds, non-targeted fish species and the upstream flight and downstream drift of insects. Physical processes include the movement and distribution of debris and sediment and the shifting of channel patterns. Some of these functions may be blocked by road fills and culverts that are too small in relation to the stream corridor.

Debris and bed material should be managed by allowing them to pass unhindered through the culvert. When debris is trapped, fish-passage barriers are created, the debris is not passed to the channel downstream, and a backwater is created upstream that extends the negative effect of the culvert. While the size of the culvert developed by the design processes described in this guideline will normally be adequate to pass most debris and bed material, there may be special cases where the culvert size should be increased to avoid capturing debris. Additionally, the Hydraulic Design Option discussed later in this guideline may undersize the culvert for debris, so a factor of safety must be applied.

Twin culverts and multiple parallel culvert pipes are generally not acceptable because they trap debris, create barriers to fish migration and increase the risk of culvert failure. In the case of low road profiles, raising the road elevation should be considered as an alternative to multiple culverts.

Debris racks might be a reasonable, temporary solution in special cases, if an existing culvert has a high risk of debris plugging and there is a clear responsibility and committed schedule for replacing the culvert. The debris rack for this situation should be mounted high on the culvert, above the ordinary high water mark. The space below it is left open for typical flows. The rack itself is only functional at high flows when debris is moving. Openings within the bar rack should be no smaller than nine inches. A specific monitoring and maintenance plan should be developed for any debris rack, and convenient access must be provided for these activities.

Ecological connectivity issues are difficult to quantify and generalize, but they may ultimately be significant to the health of aquatic ecosystems. More development of the concept of ecological connectivity in relation to road culverts is expected and encouraged.

Channel Maintenance

Other than fish passage, the need for channel maintenance created by poor siting of road crossings and culverts is the greatest impact culverts have on aquatic habitats. Highways are often placed at the fringe of river floodplains and must, therefore, cross the alluvial fans of small streams entering the floodplain. As each stream enters the relatively flat floodplain, a natural deposition zone is created, and the channel is prone to excursions and avulsions across its alluvial fan. Culverts placed in these locations tend to fill with bed material. To keep the culvert from plugging and the water overtopping the road, periodic (in some cases as frequently as annually) channel dredging becomes necessary. Bed-material removal is a major cause of channel instability and loss of spawning and rearing habitat for some distance upstream and downstream. It also has an ecological connectivity impact by blocking bed material and the aggrading channel process from migrating throughout the reach.

Mitigation for these channel maintenance impacts includes installing a bridge or a culvert large enough that the aggradation and channel-evolution processes can continue. A bedload sump might be useful in some situations to localize the dredging needed at existing culverts and even eliminate the upstream impacts of dredging. (Information on the design of such sediment traps can be found in the upcoming Washington Department of Fish and Wildlife document, Stream Habitat Restoration Guidelines.) Removing the road is usually the most expensive, but is normally considered a superior alternative.

Construction Impacts

Construction impacts might include the release of sediments or pollutants, temporary fish passage barrier during construction, removal of bankline vegetation, blocking of the flow or stranding of fish. Provisions in WAC 220-110-070 address these issues by way of construction timing, water-quality management, erosion- and sediment-control planning, and revegetation. Construction plans submitted for Hydraulic Project Approval should include, in addition to plans and specifications, an erosion- and sediment-control plan covering these items. The provisions of WAC 220-110-070 may be modified for specific projects.

Risk of Culvert Failure

Structural failure of culverts can cause long-term, extensive and massive damage to habitat. Failures can be a result of inadequate design, poor construction, beaver damming, deterioration of the structure or extreme natural events. Risk of failure can be minimized by sizing the culvert to accommodate extreme flow events and debris. This may include appropriate inlet and/or outlet armoring and the use of proper backfill and compaction techniques during construction.

In some cases, fords or alternative road overflow points may be useful. They should be considered along forest roads that are susceptible to debris flows or along roads that cross alluvial fans (for guidelines on ford design, contact WDFW for Technical Assistance).

Chapter 2 – Fish Barriers at Culverts

The parameters provided in WAC 220-110-070 serve as the technical definition of a fish-passage barrier and the basis for fish-passage design. Some level of barrier is assumed to be present when the criteria are not achieved. The regulation is included in Appendix B, *Washington Culvert Regulation*.

Barriers block the use of the upper watershed, which is often the most productive spawning habitat, considering channel size, substrate and available rearing habitats. Fish access to upper portions of the watershed is important; fry produced there then have access to the entire downstream watershed for rearing. Complete barriers block all fish migration at all flows. Temporal barriers block migration some of the time and result in loss of production by the delay they cause (adult/mini salmonids survive only a limited amount of time in fresh water, and a delay can limit egg distribution or cause mortality). Partial barriers block smaller or weaker fish within a species and limit the genetic diversity that is essential for a robust population. Fish passage criteria accommodate weaker individuals of target species, including, in some cases, juvenile fish.

There are five common conditions at culverts that create migration barriers:

- excess drop at the culvert outlet;
- high velocity within the culvert barrel;
- inadequate depth within the culvert barrel;
- turbulence within the culvert; and
- debris and sediment accumulation at the culvert inlet or internally.

The interior surface of a culvert is usually designed to optimize water passage; it does not have the roughness and complexity needed to slow down the flow that a streambed does. Instead, the culvert concentrates and dissipates energy in the form of increased velocity, turbulence or downstream channel scour are the most prevalent blockages at culverts.

A culvert is a rigid boundary set into a dynamic stream environment. As the natural stream channel changes, especially with changes in hydrology due to land use changes, culverts often are not able to accommodate those changes. Instead, they become barriers to fish passage.

Fish-passage barriers at culverts can be the result of improper design or installation, or they may be the result of subsequent changes to the channel. Fish-passage barriers are very often the result of degrading channels, leaving the culvert perched above the downstream channel. Changes in hydrology due to urbanization are a common cause of channel degradation. Fish-passage barriers are also caused by scour pool development at the culvert outlet. The scour pool may be good habitat in itself but it moves the backwater control of the downstream channel further downstream and creates a drop at the outlet. The presence of large scour pools at a culvert outlet and/or mid-channel gravel bars upstream of the culvert are often indicators that a velocity barrier for fish exists inside the culvert at high flows.

All fish-passage structures require some level of maintenance. Adult fish typically migrate during the high flow seasons and in response to freshets. Timely inspections and maintenance during inclement weather are necessary at all facilities. When culverts are not adequately inspected and maintained, fish-passage barriers can form. The maintenance done at a culvert for the purpose of high flow capacity is often different than what is required for fish passage. For example, debris that is plugging slots in baffles for example may not affect the flow capacity of a culvert, but it may block fish from passing through. More than a cursory inspection of the culvert inlet and outlet is necessary for an adequate fish passage maintenance program.

Many fish passage barriers that occur at high stream flows are not apparent during low and normal stream flows. For a complete fish-passage assessment, culverts must be analyzed at both the low and high fish-passage design flows. Definition and selection of design flows are discussed in this guideline. The Washington Department of Fish and Wildlife has developed a spreadsheet to determine if a culvert meets the criteria in WAC 220-110-070. The spreadsheet can be found in the ***Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual***, published by the department and available at www.wdfw.wa.gov/hab/engineer/fishbarr.htm. The manual provides guidance on how to locate, assess and prioritize fish passage problems (e.g., culverts, dams, fishways) and problems associated with surface-water diversion screens.

Chapter 3 – Culvert Design For Fish Passage

Many road crossings in Washington State have been designed or retrofitted to provide fish passage. The experience of observing and monitoring such sites, together with research on fish migration behaviors and swimming capabilities, has led to several straightforward design procedures outlined in this guidance. Chapter 1, Habitat Issues at Road Crossings, addressed the first step in the design process, which involves becoming aware of the potential habitat issues that arise when roadways cross streams. Chapter 2, Fish Barriers or Culverts, identified some of the concerns to be addressed if culverts are to be used to convey a stream through a roadway crossing. This chapter and the rest of this guidance describe how to design a culvert to provide fish passage. A general flow chart of the culvert-design process for fish passage is shown in **Figure 3-1**.

Figure 3-1 Culvert Design for Fish Passage

A general flow chart of the culvert design process.

Design of Road Culverts for Fish Passage provides specific guidance to satisfy state regulations and to cover additional situations that exceed those defined by regulations. The criteria provided here are not absolute; however, if they cannot be achieved for a specific project, then other road crossing means should be considered instead. Such options may include installing a temporary culvert, rerouting the road to eliminate the stream crossing or constructing a bridge. Variances to some design criteria can be approved if adequate justification is provided.

Recent experience in western Washington has shown that about 25 percent of fish passage barriers at culverts have required full replacement of the culvert. Some of these replacements have been accomplished by boring new culverts through high road fills. About five percent have required retainment of the culvert with a bridge or abandonment of the roadway. These percentages will likely change as more culvert barriers are fixed in low gradient areas and projects move upstream to higher gradient reaches.

When culverts are the solution of choice, effective fish passage can often be provided through the proper determination of culvert slope, size, elevation and roughness. Constructing formal structures and allowing the upstream channel to regrade to a steeper gradient can also be useful. Fish passage construction at low gradient sites can usually be limited to within 100 feet or less of the channel length outside the culvert; construction at steeper sites may extend further upstream and downstream from the culvert, or it may require formal fish ladders or full culvert removal.

The determination of adequate fish passage at a culvert is based on criteria described in WAC 220-110-070. This regulation describes two different approaches for ensuring fish passage:

1. the No-Slope Design Option; and
2. the Hydraulic Design Option.

A third option is also acceptable: it is the Stream Simulation Design Option, in which an artificial stream channel is constructed inside the culvert.

The No-Slope Design Option results in reasonably sized culverts without requiring much in the way of calculations. The Hydraulic Design Option requires hydrologic and open-channel hydraulic calculations, but it usually results in smaller culverts being required than the No-Slope Design Option. (Smaller culverts may trap more debris, however, so a factor of safety must be applied.) The Hydraulic Design Option is based on velocity, depth and maximum-turbulence requirements for a target species and age class. The Stream-Simulation Design Option involves constructing an artificial stream channel inside the culvert, thereby providing passage for any fish that would be migrating through the reach.

It is difficult in most situations, if not impossible, to comply with velocity criteria for juvenile fish passage using the Hydraulic Design Option. The No-Slope and Stream-Simulation Design options, on the other hand, are assumed to be satisfactory for adult and juvenile passage; thus, they tend to be used more frequently at sites where juvenile fish passage is required. Application of the No-Slope Design Option is most effective for relatively short culverts at low gradient sites.

Road-Crossing Siting

Fish-passage barriers and the cumulative habitat loss caused by culverts can be reduced in part by properly siting the culvert and by minimizing the number of road crossings. Both the siting of culverts and the land-use planning that creates the need for the culverts are important.

Culvert Siting

The goal in siting a culvert is to make the culvert as short as possible without deviating from the direction of the upstream and downstream channel course by more than 30 degrees. A culvert that mirrors the exact course of a stream may be long enough to become a fish-passage barrier. On the other hand, a culvert made shorter by deviating the course of the stream at an extreme angle (greater than 30 degrees to the channel) will reduce the success of fish passage by increasing inlet contraction and turbulence at high flows. Increased contraction also makes the culvert less efficient for flood capacity and sediment transport. In-channel deposition and bank scour often occur upstream of culverts with excess skew. When the culvert is skewed relative to the downstream channel and the culvert outlet is not directed at the channel alignment, there is an increased risk of bank erosion.

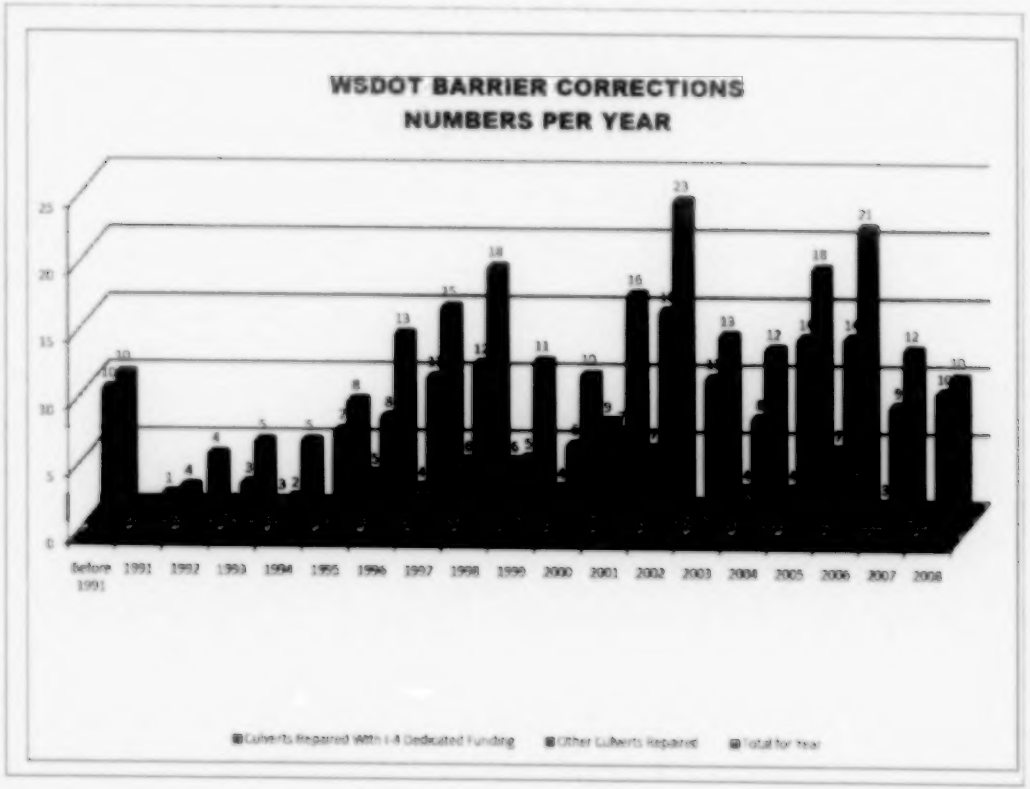
It's also important to anticipate potential natural lateral migration or vertical changes of the channel when siting a culvert. The installation of a culvert fixes a section of the channel rigidly in place. If a stream is naturally unstable and/or is migrating across a floodplain, the rigidity of the culvert may exacerbate the stream's instability, accelerate the stream's migration rate or make the stream's migration become more pronounced and chaotic. Channels naturally move vertically over time. Instabilities may occur in which the channel bed continues to aggrade (rise) or degrade (incise) over long periods of time. A channel may also fluctuate in elevation in response to floods. Long-term or short-term channel changes must be accommodated in culvert design. If they can't be accommodated, other solutions, such as a bridge or an alternative road alignment, may be more appropriate.

Land-Use Planning

Many new stream crossings can be avoided (or at least the number required can be reduced) through proper land-use planning. Even the best of fish-passage design has the potential to become a fish-passage barrier. The way local jurisdictions prepare and implement land-use plans and critical-areas ordinances has a direct influence on fish passage success by distributing land uses and the transportation systems necessary to support them. For example, if a county fails to allocate forest or agricultural land, applying instead a very dense pattern of urban, suburban or rural residential land uses, one can expect many stream crossings to be required. This would not be the case if less dense and intense land uses such as forestry or agriculture, were coupled with a combination of compact, urban growth areas and large rural parcels.

In addition to the number of road crossings, changes in hydrology and riparian areas due to dense urbanization also affect fish passage. These changes cause channel erosion and channel simplification that often leave culverts perched above the downstream channel, forming barriers to fish migration. Other deeply impacts are sediment and temperature impacts. With these changes, the only adequate habitat left is confined to areas upstream of the urbanization, making downstream fish passage barriers even more damaging to fish production.

Fish passage is not the only habitat concern created by the improper design of fish culverts. These concerns are described in detail in Chapter 1.


WSDOT BARRIER CORRECTIONS
NUMBERS PER YEAR
25
20
15
10
5
0
Before 1991
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
Culverts Repaired With I-4 Dedicated Funding
Other Culverts Repaired
Total for Year

Road	MP	Salr Id	Stream	Trib To	Priority Index (PI)	Habitat Gain (meters)
SR 5	256.15	991006	Squalicum Cr	Bellingham Bay	58.2	34,827
SR 8	6.3	990133	Wildcat Cr		52.7	21,924
US 2	23.07	07 0939 0 40	Wiggins Cr	Skykomish R	50.82	15,105
SR 3	40.95	15 02291 010	Chico Cr	Dyes Inlet	48	35,048
SR 202	0.1	102 L002	Little Bear Cr	Sammamish R	42.1	29,019
SR 16	28.1	990017	Anderson Cr	Sinclair Inlet	38.6	9,295
SR 16	28.1	998753	Anderson Cr	Sinclair Inlet	32.33	9,295
SR 96	0.47	102 N103	North Cr	Sammamish R	32.09	3,970
SR 101	267.16	990219	Johnson Cr		31.46	7,252
SR 548	4.7	990479	Terrell Cr	Birch Bay	31.43	11,313
SR 305	2.44	994325	Unnamed	Murden Cove	29.44	2,356
SR 307	0.49	991123	Dogfish Cr	Liberty Bay	27.97	7,891
SR 503	15.84	991656	Rock Creek		27.46	13,644
SR 6	5.37	990805	Unnamed	Willapa River	25.91	3,511
SR 101	102.14	990032	Unnamed	SB Big Cr	25.82	7,870
SR 101	149.06	990178	Hadlow Cr	Queets River	25.68	5,525
SR 162	11.04	105 R021121a	Carol Cr	Carbon R	23.48	2,906
SR 11	20.25	994389	Padilcos Cr	Bellingham Bay	22.72	4,213
SR 112	57.61	990002	Colville Cr		22.03	15,710
SR 99	54.24	102 N192	North Cr	Sammamish R	21.31	518
SR 307	1.34	991909	Unnamed	Dogfish Cr	20.92	3,372
SR 101	61.15	990053	Butte Cr	Smith Cr	20.69	2,880
SR 8	9.1	990773	Unnamed	Mox Chehalis	20.63	2,481
SR 5	58.63	990152	Foster Cr	Cowlitz River	20.56	6,939
SR 112	47.1	990304	Nelson Cr		20.42	4,694
SR 112	25.6	991730	Unnamed	Pryst	20.31	3,347
SR 101	303.01	994494	Marple Cr	Hood Canal	20.05	2,756
SR 12	9.04	994791	Unnamed	Wynoochee R	19.5	2,649
SR 101	90.73	990076	Unnamed	Hoquiam R	19.5	323
SR 112	33.21	990214	Joe Cr		19.37	7,158
SR 503	13.25	991657	Unnamed	Rock Cr	18.88	3,325
SR 101	100.9	990726	Unnamed	SB Big Cr	17.97	1,232
SR 542	38.98	990006	Chesnuy Cr	NF Nooksack R	17.41	306
SR 503	25.36	990073	Chelatchee Cr		16.8	2,032
SR 307	1.46	991572	Unnamed	Dogfish Cr	16.41	1,024
SR 12	95.75	990180	Highland Cr	Tilton River	16.12	5,980
SR 112	29.12	991722	Indian Cr		15.98	2,567
SR 530	42.9	990151	Forbson Cr	NF Stillaguamish R	15.37	1,030
SR 503	33.04	994531	Brooks Cr		15.28	2,072
SR 7	5.5	990831	Unnamed	Tilton River	15.13	794
SR 109	33.1	991272	Wayne	Pacific Ocean	14.45	3,972
SR 19	4.3	990711	Seersonville Cr	EF Chemacum Cr	14.11	3,178
SR 101	209.32	990564	Wiesn Cr		13.7	3,273
SR 9	67.33	991448	NP Cr	Samish R	12.68	2,101
SR 109	36.43	991270	Unnamed	Pacific Ocean	12.18	3,081
SR 112	52.9	991660	Northstrom Cr		11.46	4,855
SR 7	41.17	990297	Mack Creek		24.61	8,348
TOTAL						

WRIA	Proposed Solution	Estimated Cost	Region
1	Replace with 25' stream simulation culvert	$8,341,858	NW
22	Retrofit of existing 20'Wx8'H box culvert	$268,100	Oly
7	Remove flume structure under bridge & reconstruct stream channel	$750,000	NW
15	Replace culverts with 4 bridges	$26,700,000	Oly
8	130' long x 42' wide by 12' tall culvert	$4,967,075	NW
15	20' wide stream simulation design (two pipes that will become one)	$8,443,544	Oly
15	see above	see above	Oly
8	Replace culvert with 11' culvert	$1,492,000	NW
19	Repair downstream rock weir w/ roughened channel	$173,000	Oly
1	Replace 8' round culvert with 24' wide stream simulation culvert	$3,837,028	NW
15	Replace 5'x4' culvert with 14' wide no slope	$2,948,000	Oly
15	Replace 4' culvert with 15'x10' no slope culvert	$2,231,700	Oly
27	24'Wx12'hx110'L no slope design	$1,338,348	SW
24	14'W stream simulation design	$950,000	SW
22	Replace with a stream simulation design	$1,230,000	Oly
21	Replace box culvert with a bridge	$5,103,118	Oly
10	Replace 3'x2' culvert with	$1,500,000	Oly
1	Convert 2,310' pipe to storm sewer and build new creek channel	$6,500,000	NW
19	Replace two 4' culverts with a 24' stream sim culvert	$2,621,354	Oly
8	Replace 2.5' pipe with a 12' stream sim culvert	$2,314,000	NW
15	Replace 4' culvert with 15'x10' stream sim design	$2,440,228	Oly
24	14'W stream simulation design	$600,495	SW
22	Retrofit of existing 4'Wx4'H box culvert	$143,100	Oly
26	Retrofit of existing 9'x9' box with 6 downstream grade controls	$363,808	SW
19	15' wide stream simulation	$1,338,400	Oly
19	12' wide stream simulation	$836,709	Oly
17	140' bridge	$4,467,000	Oly
22	12' diameter round no slope culvert	$1,048,000	Oly
22	8' round stream simulation	$974,300	Oly
19	20' wide stream simulation	$1,855,000	Oly
27	20'Wx20'hx110'L stream simulation	$1,674,000	SW
22	10' wide stream simulation	$931,044	Oly
1	30' span bridge	$866,654	NW
27	12'Wx8'H no slope design	$656,508	SW
15	Replace with 13' stream simulation culvert	$2,726,000	Oly
25	16' W x 90' L stream simulation design	$748,328	SW
19	Replace 2' culvert with 12' stream sim and removes hairpin curve	$2,843,225	Oly
5	15'W x 12'H stream simulation culvert w/ grade controls	$2,528,424	NW
27	22'Wx120'L stream simulation design	$1,366,464	SW
26	40' W x 116' L bridge	$2,424,723	SW
21	Replace culvert with 200' bridge	$4,992,000	Oly
17	Replace 2' culvert with 10' stream sim design	$1,215,169	Oly
19	Replace 5' culvert with 17' stream sim design	$1,670,885	Oly
3	Replacement with a 12' stream simulation box	$1,104,502	NW
21	Replace fishway with 60' to 80' bridge	$2,300,250	Oly
19	Replace 5' culvert with 18' stream sim design	$2,382,467	Oly
11	Replace double box culvert with 22' wide stream simulation culvert	$1,729,600	Oly
		$127,967,487	

THE HONORABLE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UNITED STATES OF AMERICA, et al., Plaintiff, vs STATE OF WASHINGTON, et al., Defendant.	No. C70-9213 Subproceeding 01-1 DECLARATION OF LAWRENCE JAY WASSERMAN

I, LAWRENCE WASSERMAN, declare as follows:

1. I am over the age of eighteen and am competent to testify on the matters set forth herein. I make this declaration and the report attached hereto on the basis of my personal knowledge, skill, experience, training and education.

2. I received a Bachelor of Arts degree in Biology from the State University of New York at Buffalo in 1976 and a Master of Science Degree in Fisheries from the University of Washington in 1984. My thesis for my master's degree is entitled "The Rearing Potential for Coho Salmon (Oncorhynchus kisutch) in Streams Affected by the Eruption of Mount St. Helens."

3. I have authored or co-authored the following scientific papers:

Cause No. C70-9213, Sub. 01-1
Plaintiffs' Exhibit AT-010

SWINOMISH INDIAN TRIBAL COMMUNITY
OFFICE OF TRIBAL ATTORNEY
11404 MOORAGE WAY
LA CONNER, WA 98257
PH: (360) 466-3163, FAX: (360) 466-5289

a. Wasserman, Lawrence Jay. 1984. "The Rearing Potential for Coho Salmon (Oncorhynchus kisutch) in Streams Affected by the Eruption of Mount St. Helens. M.S. Thesis. Univ. of Washington." 108 pp.;

b. Wasserman, Lawrence J., Carl J. Cederholm, and Ernest O. Salo. 1984. "The Impact of Logging on Benthic Community Structure in Selected Watersheds of the Olympic Peninsula, Washington." Univ. of Washington. Tech. Rep. FRI-UW-8403;

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f. Martin, Douglas J., Lawrence Wasserman, Robert P. Jones, and Ernest O. Salo. 1984. "Effects of Mount St. Helens' Eruption on Salmon Populations and Habitat in the Toutle River." Office of Water Research and Technology., Washington Water Research Center. Tech. Comp. Rep. 130 pages;

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g. Beechie, T., Beamer E. and Wasserman, L. 1994. "Estimating Coho Rearing Habitat and Smolt Production Losses to develop a Restoration Strategy for a Large River Basin," N. Amer. J. Fish. Mgmt. 14:797-811;

h. Hollowed, John J. and Wasserman, L. 1999. "A Critique of the State's Hydraulic Code, RCW 75.20," Center for Natural Resource Policy Report; and

i. Hollowed, John J. and Wasserman, L. 2001. "A Critique of the Washington States' Instream Resource Protection Laws and Regulations," Center for Natural Resource Policy Report.

4. The aforementioned paper entitled by "Estimating Coho Rearing Habitat and Smolt Production Losses to develop a Restoration Strategy for a Large River Basin" authored by myself and two of my colleagues at the Skagit System Cooperative was awarded a citation by the American Fisheries Society for the Most Significant Paper in the North American Journal of Fisheries Management for 1994.

5. Between 1983-1986 I was employed as Environmental Services Director by the Yakama Nation as a researcher and project manager. Among my duties, I investigated the potential for restoring Chinook salmon populations through the use of hatchery supplementation. I also investigated the movement of juvenile Spring Chinook throughout the Yakima River. I was involved with the design and operation of a large smolt trap on the Yakima River.

From 1986 to 1991, I continued in my role as Environmental Services Director, but my duties changed. In this period of time, I oversaw environmental protection of fisheries resources for the Yakama Nation. My area of responsibility included the Columbia River Watershed and its tributaries above Bonneville Dam within Washington State. My

responsibilities included, but were not limited to: (a) reviewing and commenting on forest practices applications, water rights applications, permits for on and off reservation timber sales; (b) reviewing and commenting on local, State and Federal legislation; (c) reviewing, commenting and negotiating, where necessary, hydraulic project approvals, and general land use permits issued by municipal, County, State and Federal agencies. In this capacity, I was responsible for providing technical recommendations to the Yakama Tribal Council regarding the impact such activities might have on fisheries resources and what action the Yakama Nation could take to protect such resources. Additionally, I was tasked with locating blocking culverts on the Yakama Indian Reservation.

During this time I was involved as a negotiator in the Timber, Fish and Wildlife Agreement, which was a negotiated agreement between the State of Washington, the Washington Forest Practices Association, Washington Farm Forestry Association, , Washington State Indian Tribes, and several environmental organizations. This agreement resulted in increased protection for fisheries resources affected by Washington State's Forest Practices rules. I was also involved in the establishment of the Hanford Reach National Monument on the Columbia River, which provided permanent protection for the last free flowing section of the Columbia River.

6. From 1991 until 2007 I was employed as Environmental Services Director by the Skagit System Cooperative ("SSC"), which represented the fisheries interests of the Sauk-Suiattle Indian Tribe, the Upper Skagit Indian Tribe and the Swinomish Indian Tribal Community. SSC changed its name to the Skagit River System Cooperative ("SRSC") in 2004 when the Upper Skagit Indian Tribe withdrew from the consortium. My work for both SSC and SRSC entailed

advocating for the protection of natural resources and specifically for the protection and restoration of fisheries throughout the Tribes' usual and accustomed fishing areas. However, the area of greatest emphasis was the Skagit River watershed, which is the third largest river in the western United States and contains wild populations of all six species of Pacific salmon. A portion of my work was dedicated to reviewing the scientific literature and analyzing Skagit Basin specific field data addressing the impacts of land use practices on salmon habitat and the use of that data in developing strategies for the protection of Tribal resources. I have been involved with drafting regulations regarding watershed analysis pursuant to the Washington State Forest Practices Act, and have served as a member of tribal negotiating teams involved in State-wide negotiations associated with instream flows, forest practices, and agricultural practices. Much of my work has been focused on developing mechanisms to protect Tribal natural resources. These fora have included discussions and negotiations with elected leaders at the local, State and Federal levels, with local and statewide business, recreational, and environmental interests, and with other Tribes and Tribal organizations. This work includes the development of management strategies to protect and restore Tribal resources through collaborative as well as legal means.

7. In 2007 I began employment at the Swinomish Indian Tribal Community as Environmental Policy Manager. My duties and responsibilities are the same as those previously provided to the Sauk-Suiattle Indian and Swinomish Tribes while I was employed by Skagit River System Cooperative as Environmental Services Director.

8. Over the last twenty-five years, I have kept current on the literature associated with the Pacific salmon life histories and habitat management. In addition to the work identified above, I

have undertaken scientific analyses regarding riparian vegetation management and the setting of instream flow levels for salmon by the State of Washington.

9. For at least twenty years, I have been a member of the American Fisheries Society and am past Secretary-Treasurer of the North Pacific International Chapter of the American Fisheries Society and served for 2 years. I was formerly a member of the North American Benthological Society.

10. I am currently Vice-President of a non-profit organization called the Center for Natural Resource Policy, which provides Native American tribes and members of the public with policy, legal, and scientific support on fisheries and other natural resource issues.

11. From 1997-2008 I was Vice-Chair of the Skagit Watershed Council, a watershed based non-profit organization made up of multiple stakeholders. The mission of the Council is to promote voluntary salmon restoration projects within the Skagit River watershed. We developed a restoration strategy for the recovery of salmon in the Skagit River as well as criteria by which the Watershed Council would evaluate restoration projects for submittal to funding agencies.

12. Attached hereto and incorporated by reference is a true and complete copy of a report that I prepared at the request of counsel for the Plaintiff-Intervenor Tribes in this case. The report describes basic life history strategies and requirements of salmon and steelhead that occur within the *United States v. Washington* Case area.[1] It contains four parts: first, I describe in

[1] I use the term "case area" as it was defined by Judge Boldt in *United States v. Washington*, 384 F.Supp. 312, 327 (W.D. WA. 1974), namely, "that portion of the State of Washington west of the Cascade Mountains and north of the Columbia River drainage area, and includes the American portion of the Puget Sound watershed, the watersheds of the Olympic Peninsula north of the Grays Harbor watershed, and the offshore waters adjacent to those areas."

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general terms life history characteristics and essential habitat components common to all salmon. Second, I discuss species specific life history strategies and factors influencing salmon survival. Third, I describe the impacts of culverts that impede fish passage and/or result in adverse environmental impacts to salmon habitat and why repairing culverts make sense financially, socially, and biologically. Fourth and finally, I describe Tribal efforts to protect and restore salmon populations, including efforts to repair culverts. For the purposes of this declaration and report, Pacific salmon and steelhead will be referred to as salmon throughout the document unless otherwise noted.

13. In preparing my report, I have generally relied upon the Joint Statement Regarding the Biology, Status, Management and Harvest of the Salmon and Steelhead Resources of the Puget Sound and Olympic Peninsular Drainage areas of Western Washington (hereinafter Joint Biological Statement) prepared in 1973 for use by the Washington Department of Fisheries, Washington Department of Game, and the U.S. Fish and Wildlife Service for this case and was admitted into evidence as JX-2a[2] as well as a more current and extensive treatise on Pacific salmon by Groot, C., and L. Margolis entitled Pacific Salmon Life Histories (University of British Columbia Press, Vancouver, British Columbia, 1991). The latter treatise is recognized as a reliable authority by experts in the field of fisheries for the propositions set forth in my report.

14. Figure 5.1 is a true and correct copy from Beamer, et al. (1998). This figure demonstrates graphically the relationship between density of salmon and salmon production:

2 *United States v. Washington*, 384 F.Supp. at 328.

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I am familiar with this relationship and the Beaverton-Holt stock recruitment curves. I can attest that the graph in Figure 5.1 accurately demonstrates this relationship in the Skagit watershed. The data shown in this figure are considered reliable by scientists in my field of expertise.

15. Figure 4.1 is a true and correct copy from the Skagit Chinook Recovery Plan, Appendix D prepared by the Skagit River System Cooperative and Washington Department of Fish and Wildlife (WDFW) in 2005. This figure demonstrates graphically the concept of density dependence and density dependence mortality in the Skagit watershed. I am familiar with both of these two concepts in a general manner and as they pertain to the Skagit watershed. I can attest that the graphs in Figure 4.1 accurately demonstrate these two concepts in the Skagit watershed. The data shown in this figure are considered reliable by scientists in my field of expertise.

16. Attachment A is a true and correct copy of an illustration entitled Pacific Salmon lifecycle prepared by the Washington Department of Fish and Wildlife. It illustrates the general life history strategies of anadromous salmonids. As a fisheries biologist, I am familiar with these life history strategies, and can attest that the picture in Figure 1 accurately explains those strategies for Pacific salmon. The data shown in this figure are considered reliable by scientists in my field of expertise.

17. Attachment B is a true and correct copy of pages 17-20 of the Joint Statement Regarding the Biology, Status, Management and Harvest of the Salmon and Steelhead Resources of the Puget Sound and Olympic Peninsular Drainage areas of Western Washington prepared in 1973.

for use by the Washington Department of Fisheries, Washington Department of Game, and the U.S. Fish and Wildlife Service for this case and admitted into evidence as JX-2a.

18. Attachment C is a true and correct copy of pages 7-13 from the Washington Department of Fish and Wildlife's Manual entitled *Design of Road Culverts for Fish Passage* (2003). These pages discuss impacts associated with culverts. As a fisheries biologist, I am familiar with biological life histories of salmon and how those life histories are impacted by fish passage barriers, specifically culverts. These pages from WDFW's Manual accurately explain those impacts and would be considered to reliably depict those impacts by scientists in my field of expertise.

19. Attachment D is a true and correct copy of a photograph that I took on a digital Pentax Optio W20 camera on 9/1/2006 (8/30/2006). It shows a culvert on an unnamed tributary to the Nooksack River (Site No.T39R05E-27) that will not allow for upstream passage of either adult or juvenile salmon because the distance between the water surface elevation and the bottom of the culvert is too great for the fish to ascend. The photograph accurately portrays the scene which I personally witnessed.

20. Attachment E is a true and correct copy of a photograph that I took on a digital Pentax Optio W20 camera on 9/1/2006. It shows elimination of rearing habitat within a culvert adjacent to Site No.T39R-05-27 on DNR S1100. The photograph accurately portrays the scene which I personally witnessed.

21. Attachment F is a true and correct copy of a photograph that I took on a digital Pentax Optio W20 camera on 9/01/2006. It shows an unnamed tributary to the Nooksack River, shows a

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culvert with adequate substrate within the culvert Site No. T39R06E-119. The photograph accurately portrays the scene which I personally witnessed.

22. Attachment G is a true and correct copy of a photograph taken by Kurt Buchanan, a fisheries biologist at the Washington Department of Fish and Wildlife on 12/9/2004. It shows the culvert at Red Cabin Creek (Site No.AR11) in December 2004 in the Skagit Basin under State Route 20 filled with sediment prior to dredging by the Washington Department of Transportation (with his handwritten notes excised). The photograph was provided to the Skagit River System Cooperative by Mr. Buchanan as part of our work on culverts and Red Cabin Creek in particular. I routinely receive and rely on photographs of this type in performing my professional duties as a fisheries biologist. The photograph accurately portrays scenes which I have personally witnessed at Red Cabin Creek in 2006, 2008 and 2009.

23. Attachment H is a true and correct copy of a photograph that I took on a HTC TouchPro Cellphone camera on February 20, 2009. It shows the same culvert at Red Cabin Creek (Site No.AR11) filled with sediment. The photograph accurately portrays the scene which I personally witnessed.

24. Attachment I is a true and correct copy of a photograph that I took on a HTC TouchPro Cellphone camera on February 20, 2009. It shows the blockage at the downstream end of the same culvert (Site No.AR11) in Red Cabin Creek. The photograph accurately portrays the scene which I personally witnessed.

25. Attachment K is a true and correct copy of a photograph that I took on a digital Pentax Optio W20 camera on 8/30/2006. It shows the culvert at Red Cabin Creek (Site No. AR11)

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after the streambed had been dredged. The photograph accurately portrays the scene which I personally witnessed.

26. Attachments K and L are true and correct copies of two photographs that Keith Wyman, a former employee at Skagit River System Cooperative, took on 12/2/2002 and 12/9/2004 respectively. Attachment J shows a number of dead unspawned coho salmon stranded as a result of Washington State Department of Transportation (WSDOT) dredging activities at the same culvert (Site No.AR11) on Red Cabin Creek. Attachment K shows numerous adult and juvenile salmon that have been stranded (and subsequently died) as a result of the WSDOT maintenance activities at the same culvert (Site No.AR11) on Red Cabin Creek. Both photographs were taken by Mr. Wyman while employed at the Cooperative and provided to me as part of my daily work at the Cooperative. I routinely receive and rely on photographs of this type in performing my professional duties as a fisheries biologist. Both photographs were also provided to Kurt Buchanan of WDFW and appear in the Email referenced as Attachment M below.

27. Attachment M is a true and correct copy of an Email from Kurt Buchanan of WDFW to Greg Hueckel and Pat Chapman, with copies to Bob Bicknell, Craig Olds, Gayle Kretsman, Rich Costello, and Rich Johnson dated 12/6/2004 with his attached notes of his observations of the sediment blockage of the culvert at Red Cabin Creek (Site No. AR11). The Email and notes with photographs were provided to the Skagit River System Cooperative as part of my and the Cooperative's work on culverts and Red Cabin Creek in particular. I routinely receive and rely on Emails and reports of this type in performing my professional duties as a fisheries biologist.

28. Attachment N is a true and correct copy of a Hydraulic Project Approval (HPA) dated August 19, 2002 (Log # ST-F0760-03) issued by WDFW to WSDOT for maintenance at Red Cabin Creek (Site No. AR11). The HPA was provided to Skagit River System Cooperative by Kurt Buchanan of WDFW as part of my and the Cooperative's work on culverts and Red Cabin Creek in particular. I routinely receive and rely on HPAs in performing my professional duties as a fisheries biologist. The HPA is also a matter of public record.

29. Attachment O is a true and correct copy of a photograph that I took on a digital Pentax Optio W20 camera on 12/07/2006. It shows a culvert (Site No. 9900046) on Bruce Creek in the Nooksack Drainage filled with sediment. The photograph accurately portrays the scene which I personally witnessed.

30. Attachment P is a true and correct copy of a photograph that I took on a digital Pentax Optio W20 camera on 9/1/2006. It shows a culvert (Site No. 9900046) on Bruce Creek in the Nooksack Drainage after sediment has been removed by dredging. The photograph accurately portrays the scene which I personally witnessed.

31. Attachment Q is a true and correct copy of a photograph that I took on a digital Pentax Optio W20 camera on 9/1/2006. It shows a beaver dam constructed on culvert (Site No. 01 03530) on Bear Creek in the Nooksack watershed filled with sediment. The photograph accurately portrays the scene which I personally witnessed.

I declare under penalty of perjury that the foregoing is true and correct.

EXECUTED on this 30th day of March, 2009 on the Swinomish Indian Reservation near the

town of LaConner, Washington.

LAWRENCE JAY WASSERMAN
Environmental Services Manager
Swinomish Indian Tribal Community

United States v. Washington
United States District Court
Western District of Washington
Case No. C70-9213, Subproceeding 01-1

Written Direct Testimony Of Lawrence Jay Wasserman
Environmental Policy Manager
Swinomish Indian Tribal Community

Witness For Plaintiff-Intervenor Tribes

Testimony Prepared March 27, 2009

A. Salmon need unobstructed passage to their spawning and rearing areas.

Each species and population of salmon has preferred geographic areas and gravel characteristics that they seek out prior to spawning. Since salmon do not feed in fresh water, each species and population must reach its preferred spawning area in a timely fashion so that its limited energy reserves are not depleted prior to spawning. Suitable spawning gravels are not evenly distributed throughout river and tributary systems, and natal streams may be located considerable distances from the mouth of river systems. Spawning salmon therefore need access to reach site specific spawning grounds in order to successfully spawn and produce offspring which will form the basis of the next cycle of returning adults.

Juvenile salmon also move considerable distance both upstream and downstream for a number of reasons. Their life history requirements are such that they need to find the appropriate depths, velocities and substrates in which to thrive in order to maximize food intake and minimize the expenditure of energy while swimming. Too many fish in one area may overwhelm the available food supply resulting in reduced growth rates of juvenile fish. The ability to migrate throughout streams provides individuals an opportunity to find lower density areas where food supplies may be more plentiful. Survival of juvenile fish is greatly influenced by body size, which in turn is related to the balance between energy expenditures and availability of food supply.

Juvenile salmon need to find refuge areas to avoid predation, and to escape from high velocity streamflows during flooding or high temperatures that can be life threatening.

Adequate access to all parts of a watershed is necessary for dispersal of juvenile salmon populations. Salmon fry redistribute themselves to low velocity areas, such as side channels and slough areas after emergence. This redistribution is important so that young fish can colonize all accessible parts of the watershed, thereby reducing density dependent mortality. Both juvenile steelhead and coho salmon swim downstream from their natal streams during the summer months, and then upstream either in their home tributary or in other tributaries with the onset of fall rains. (Cederholm and Scarlett, 1981). Unimpeded passage provides the opportunity for juvenile salmon to access these important areas.

Finally, salmon need unimpeded access to the sea as smolts. Juvenile salmon generally move as smolts to the sea in late winter or spring, when stream flows are conducive to rapid downstream migration. If downstream passage is impeded so that fish cannot access the sea, the critical component of ocean residency is lost, with a resultant loss of production of fish from within the watershed.

B. Salmon require an adequate supply of cool water.

Access to stream segments with appropriate water temperatures is an important component of ensuring that life history requirements at each life state are met. Salmon extract oxygen from water and the amount of oxygen in the water is dependant on a variety of factors including temperature. Lower streamflows in summertime coupled

E. Chum Salmon

Chum salmon generally return to Washington streams from September through December after spending two (2) to five (5) years at sea. Peak spawning occurs in late November through December, with reports of spawning occurring as late as March in the Nisqually River. (Joint Biological Statement, p. 6). Spawning areas occur near tidewater in the coastal streams of the Olympic Peninsula, while in Puget Sound, spawning tends to occur in the lower gradient portions of rivers and streams, and in backwaters, side channels and ponds with areas of upwelling. Chum salmon fry begin to move downstream soon after emergence, but in contrast to pink salmon, they spend a few days to weeks in estuarine areas prior to entering marine waters.

F. Steelhead

Steelhead tend to spend two (2) to four (4) years at sea before returning to spawn. There are two broadly defined runs of steelhead in Puget Sound: winter run and summer run. Summer run steelhead tend to enter rivers from June through October, while winter run steelhead enter from November through May. Peak spawning occurs in April and May. Steelhead spawn in large rivers and in both small and large tributaries. Juvenile steelhead are found throughout the upper reaches of small tributaries as far upstream as is accessible. They spend one to two years in freshwater prior to seaward migration. As with coho and spring chinook, juvenile steelhead require an adequate supply of high quality habitat during their extended freshwater residence time.

IV. FRESHWATER FACTORS INFLUENCING SURVIVAL AND MORTALITY OF SALMON

A. Overview of Density Dependent Mortality.

The number of adult fish produced within a watershed is a product of the quality and quantity of available habitat coupled with the number of eggs produced by the adults that return to spawn. The number of fish available to be harvested or to spawn depends upon several factors: (1) how many of the eggs deposited in the gravel survive; (2) how many fish that emerge from the gravel to migrate to sea; (3) how many adult fish survive in the ocean; and (4) how many adults make it back to their spawning grounds. These factors are affected by annual variations in environmental conditions and the quantity and quality of accessible habitat to support incubating eggs, rearing juvenile salmonids, as well as by marine conditions and harvest rates.

Beamer, *et al.* (1998) provide a description of the relationship between density of salmon and salmon production.

> The processes regulating recruitment at small stock sizes are thought to be density-independent, whereas the processes regulating recruitment at large stock sizes are thought to be density-dependent. The relationship over a range of stock sizes is illustrated as some form of curve, such as the dome-shaped Ricker relationship or the asymptotic Beverton-Holt relationship. The asymptotic Beverton-Holt relationship is often used to characterize

salmonids with extended freshwater life histories, such as coho and steelhead (Lestelle et al. 1993b). The equation

$$R = \frac{S}{bS + a}$$

is used to describe this relationship, where R is the number of smolts and S is the number of female spawners. Density-independent survival ($1/a$) is smolts per female spawner at the theoretical "zero" spawner density, and smolt carrying capacity is $1/b$. The coefficients a and b, which describe the shape of the Beverton-Holt curve, may be interpreted (at least in part) as being related to habitat characteristics (Mountain and Hilborn 1986). The parameter a is perhaps most closely related to habitat *quality*, while the parameter b is more closely related to habitat *quantity* (Lestelle et al. 1993b).

When habitat quality or quantity increase, $1/a$ or $1/b$ increase respectively. When "new" habitat area is made available to a fish stock by building a fish passage project (i.e., $1/b$ is increased), we expect to see a locally larger parent stock, and subsequently greater recruitment. Curves A and B in Figure 5-1 illustrate two cases where the habitat capacities are different, but density independent survival is the same. Curve A represents the stock-recruitment curve for a hypothetical coho stream with a carrying capacity ($1/b$) of 10,000 smolts and a density-independent survival rate ($1/a$) of 134 smolts per female spawner.[12] Curve B represents the same stream, except carrying capacity has been doubled by a fish passage project, allowing fish to utilize habitat upstream of the previous barrier. At a low spawner level (50 females), the stream can produce about 4,000 smolts before the fish passage project (curve A), but over 5,000 smolts after the project opens up new habitat (curve B). At a high spawner level (400 females[13]), the stream can produce about 5,400 smolts before the fish passage project (curve A) and over 14,500 smolts after completion of the project (curve B), a 73% increase. Curve C represents the same carrying capacity as B, but with poor quality habitat that reduces the stream's overall density independent survival by two thirds. At a spawner level of 50 females, stream C can produce only about 2,000 smolts after the project, compared to the original 4,000 smolts of curve A. Smolt production for curve C does not equal curve A until the level of 300 female spawners, and only shows a minor increase (~ 12%) at the level of 400 female spawners.

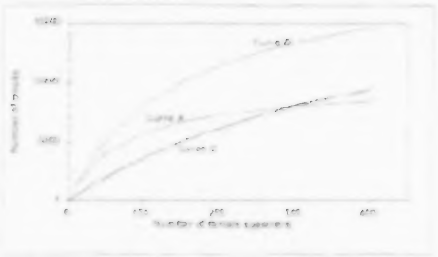


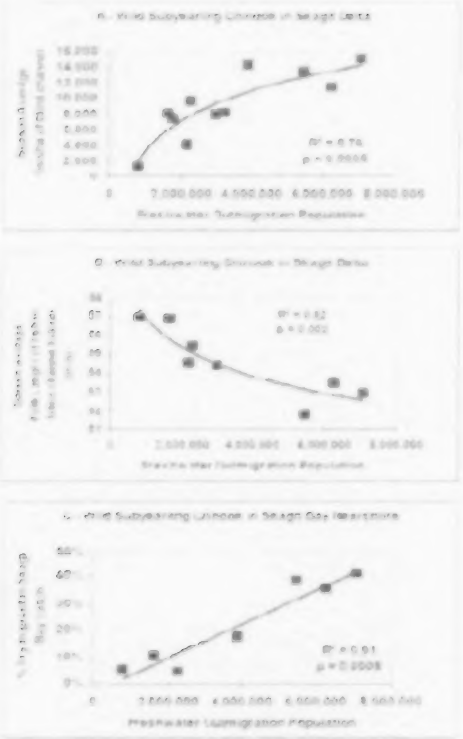
Figure 4.1. [illegible]

1) The rate is for female spawner to smolt stage, in streams where the mean winter temperature is [illegible] °C, from Reeves et al. (1989).
2) As in Lestelle et al. (1995b), we consider streams to be "fully seeded" when spawner levels are sufficient to produce ≥ 80% of smolt carrying capacity. In this case, 400 female spawners yield 1,000 smolts, or 80% of carrying capacity.

(Beamer, *et al.* 1998)

Figure 4.1 from the Skagit Chinook Recovery Plan 2005, Appendix D (Skagit River System Cooperative and Washington Department of Fish and Wildlife 2005), demonstrates graphically the concept of density dependence and density dependence mortality in the Skagit watershed. As density (measured as the number of fish per unit area) increases, one would expect that the number of smolts migrating to sea would increase proportionately. However, one can see in the Skagit estuary that once a certain density is reached, that relationship changes and the number of outmigrating fish (smolts) declines. The figure also shows that the smaller the average size of fish, the lower the number of outmigrating fish. These figures demonstrate that as the number of available spaces in the estuary fill up, with the result that there is increased competition for food and space, the survival (measured as number of outmigrants in this case) declines. In this instance, more habitat equates to more fish. To summarize, the number of fish available for harvest and spawning is, in large measure, dependent upon having access to sufficient freshwater habitat to maximize the number of smolts that migrate to the sea. These figures demonstrate that decreasing density by increasing the amount of habitat almost always increases watershed productivity.

Figure 4.1. Density dependence in the Skagit delta



(Skagit Chinook Recovery Plan, 2005)

There are a number of natural and anthropogenic causes for reduced survival of salmon in fresh and marine waters. Natural factors affecting populations include, but are not limited to, watershed productivity and available food supply, streamflows associated with precipitation, high temperatures, predation, and flooding, sedimentation, landslides, beaver activity, fires, windstorms and volcanos. These factors are all variable from year to year, and many can be influenced by human activities.

> One of the major problems facing salmon and trout populations is an inability to utilize their historic rearing and spawning grounds due to fish passage barriers that block access to upstream habitat.

Every species of salmon has been shown to be blocked by culverts, and blocking culverts have been found in every watershed within Puget Sound. A WSDOT literature review states:

> The conclusion of this literature review is that stream dwelling salmonids are often highly mobile. Upstream movement was observed in nearly all studies that were designed to detect it, and in all species, age classes, and seasons. There are variations in the movement patterns of fish populations both between and within river systems.

(Kahler and Quinn, 1998.)

It is generally acknowledged that removal of barrier culverts is a primary mechanism to restore Puget Sound salmon stocks. Fish blocking culverts are listed as a factor limiting salmon production in every watershed in Puget Sound. (Washington State Conservation Commission.) Culverts are also identified as a key factor necessary for recovery in almost every local watershed chapter of the Puget Sound Chinook Recovery Plan[1] as well as in the federal supplement to that plan. (National Marine Fisheries Service, 2006). While a recovery plan has yet to be adopted for the more recently listed steelhead,[2] similar life histories strategies between juvenile and adult coho and steelhead would indicate that similar benefits would accrue to steelhead as would be predicted for coho salmon.

Fish Passage has have also been listed as a critical component of the *Policy of the Washington Department of Fish and Wildlife and the Western Washington Treaty Tribes Concerning Wild Salmonids* adopted by the Washington Fish and Wildlife Commission (December 5, 1997) which has as its goal

> to protect, restore, and enhance the productivity, production, and diversity of wild salmonids and their ecosystems to sustain ceremonial, subsistence, commercial, and recreational fisheries, non-consumptive fish benefits, and other related cultural and ecological values.

Page 4. Policy statement 14 states:

> Provide, restore, and maintain safe and timely pathways to all useable wild salmonid habitat in fresh and marine waters, for salmonids at all life stages.

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[1] The Puget Sound Salmon Recovery Plan was approved by the National Marine Fisheries Service, National Oceanographic and Atmospheric Administration, Department of Commerce on January 19, 2007.

[2] Puget Sound Steelhead are listed as threatened under the federal Endangered Species Act. 71 Fed. Reg. 14666 (3-29-2006).

Ensure salmonids are protected from injury or mortality from diversion into artificial channels or conduits (irrigation ditches, turbines, etc.).

Ensure natural fish passage barriers are maintained where necessary, to maintain biodiversity among and within salmonid populations and other fish and wildlife.

Page 6. The document identifies the following performance measure for fish passage:

Provide and maintain free and unobstructed passage for all wild salmonids, according to state and federal screening and passage criteria and guidelines at all human-built structures.

The Washington Department of Fish and Wildlife describes how culverts affect salmon in its revised manual entitled *Design of Road Culverts for Fish Passage* (2003). The report identifies the following impacts associated with culverts:

1. Culverts result in the permanent, direct loss of instream and riparian habitat.
2. Installation and maintenance of water crossings that confine or constrict the channel or floodplain will break ecological connectivity, alter channel processes and change adjacent channel character and shape by affecting the movement of debris, sediment, channel migration, flood waters, and aquatic and terrestrial organisms.
3. Water crossings may create an entry point for road-runoff pollutants.
4. Fish passage can be hindered or blocked at water crossings.
5. Water crossings increase the risk of damage to the downstream habitat due to water crossing failure.
6. Cumulative impacts and risks of water crossings can be avoided or minimized by consolidating water crossings, employing full-span bridges, by simulating a natural channel through culverts, or removing water crossings. Access solutions that do not require water crossings are preferred.

(Excerpt attached hereto as Attachment C). Impacts resulting from the installation, operation and maintenance of culverts can be divided into two categories: spawning and rearing fish passage impacts, and habitat related impacts:

A. <u>Spawning and rearing fish passage related impacts:</u>

Barriers to upstream access to spawning and rearing areas result in a number of biological consequences to salmon populations. As stated above, returning salmon, upon entering freshwater, cease feeding and depend on stored fat reserves to meet the energetic requirements for reproductive product maturation and spawning. If, as a result of encountering a barrier culvert, adult salmon are delayed in reaching their spawning areas, or must exert a great deal of energy attempting to ascend a barrier culvert, energy reserves are depleted, and the adults may die without spawning. Partial barriers, which by definition are barriers that are impassable for adult salmon for only a portion of the year,

may have the same impact as complete barriers. The difference between partial and complete barriers is therefore merely one of what percentage of returning salmon may be affected by the barrier. In both instances prespawning mortality can occur. Those fish that cannot reach their spawning area and die unspawned do not contribute toward the total productivity of the watershed, and ultimately the number of smolts produced, and thereby adults, is reduced.

The following photograph is an example of a culvert on a tributary to the Nooksack River that will not allow for upstream passage of either adult or juvenile salmon because the distance between the water surface elevation and the bottom of the culvert is too great for the fish to ascend (enlarged version attached as Attachment D hereto)

Prespawning mortality can also occur where a culvert is a passage barrier due to either inadequate velocity or water depth, or where streambed erosion downstream from a culvert prevents access. If water velocities exceed the swimming speed capabilities of migrating salmon, they cannot ascend the culvert. Similarly, if the water depth in a culvert is too shallow, fish cannot ascend the culvert. Further, mortality can occur when adult salmon jump repeatedly when trying to ascend an inadequately constructed or operating culvert. In these instances fish may collide with the culvert creating impact injuries leading to mortality culverts.

Denial of access also results in increased spawner density downstream of impassable barriers, which may result in superimposition of redds, which can result in egg mortality. Further, if adult fish are precluded from reaching their spawning areas, then those fry that do emerge from the gravel will encounter an increased competition among emergent juvenile salmonids. As explained previously in Section IV, if juvenile densities are increased due to inadequate fish passage, the number of smolts produced will be reduced.

Barriers to upstream access reduce the spatial diversity of spawning areas for fish. This is important because having fish distributed throughout a watershed provides for a buffer from the impacts of a localized environmental damage. For example, if all the coho in a watershed were found in only one creek, and a landslide occurred in that creek, the population would be wiped out. If, on the other hand, coho were found in many creeks, the landslide would only affect a portion of the population. The watershed population as a whole could recover because there would be a continuing source of salmon to return from other parts of the stream system. This spatial diversity also provides for genetic diversity because it provides for local adaptation of discrete populations. As with the example of the landslide, fish populations with different genetic characteristics are able to withstand environmental change differently. A diversity of genetic characteristics adds to the overall robustness and survival of a population.

Adult passage barriers also reduce the productivity of streams. Salmon carcasses contribute significant beneficial nutrient sources to the watersheds in which they die. Both insects as well have fish have been demonstrated to use these carcasses as a food supply. Higher elevation streams are often more sterile than lower elevation streams, and these carcasses provide an important component of the stream ecosystem, which is eliminated if access is denied.

Barriers to juvenile and adult passage may eliminate salmon use in the best habitats within a watershed. In most watersheds, salmon habitat is more intact the further upstream one goes. Generally speaking, aside from logging activities, little human development has taken place in these higher elevation locations. These intact habitats provide a refugia for juvenile salmonids that may not be found in more environmentally compromised downstream reaches. The elimination of access to these habitats therefore has a disproportionately large impact on salmon populations because on a per unit area basis, the salmon habitat upstream might be much more productive than the habitat in lower elevation areas. One hundred (100) meters of habitat in a forested creek may produce significantly more salmon than in one hundred (100) meters of habitat in a downtown urban setting. Not only is habitat quantity compromised, but habitat quality may be as well. (Shaw and Steel, 2006).

Finally, with the onset of autumn rains, juvenile coho and steelhead move upstream into tributaries to seek refuge areas from winter storms. Movement into these refuge areas provide a critical element in the life history strategy of Pacific salmon. Passage barriers prevent this upstream movement, thereby subjecting juvenile fish to greater winter mortalities.

Along with my colleagues at the Skagit System Cooperative,[1] I conducted an analysis of the loss of coho salmon production within the Skagit River watershed. (Beechie, *et al.* 1994). This award-winning article[2] found that between 6% and 15% of the loss of coho production throughout the Skagit watershed was found to be due to blocking culverts. We calculated that blocking culverts was the second largest loss of coho production in the Skagit River watershed, led only by the loss of habitat due to diking, ditching, dredging and bank protection. When evaluating the loss of coho production in tributaries alone, however, we determined that 44% to 58% of the loss could be attributed to blocking culverts.

B. Habitat related impacts of culverts.

In addition to creating barriers to the upstream and downstream migration of anadromous fish, culverts also affect the habitat upon which these fish depend. Washington Department of Fish and Wildlife (2003) describes the impacts of culverts on salmon habitat (Attachment C hereto). The entire manual can be found on line at http://wdfw.wa.gov/hab/engineer/cm/. The following description summarizes the impacts of culverts on salmon habitat.

1. **Elimination of Spawning Habitat.** Culverts eliminate spawning habitat by replacing natural stream bottoms with metal or concrete pipes, by shortening streams due to channel realignment, by creating adverse velocities or by scour associated with higher than natural flows. Finally, additional sediments may be introduced into spawning areas as a result of culvert placement.

2. **Elimination of Rearing Habitat.** Culverts eliminate rearing habitat by replacing natural stream characteristics with those that are confined within a pipe. Habitat quality in the form of pools, riffles, and woody vegetation is rarely found within culverts. Riparian vegetation is often lost, and stream lengths may be shortened to accommodate installation. The latter occurs when meanders are cut off to accommodate road right of way. Undersized culverts increase stream velocity, thereby degrading habitat in both upstream and downstream directions. Habitat may be eliminated downstream by retarding the downstream movement of wood or by scouring habitat below the culvert when concentrated streamflows lead to higher velocities. Upstream habitat can be impacted when the stream bed upstream of the culvert erodes as a result of changing the natural stream gradient by placement of the culvert at a slope different from the original slope of the streambed.

The following photo shows the elimination of rearing habitat within a culvert (enlarged version attached as Attachment E hereto).

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[1] The Skagit System Cooperative is consortium which represented the fisheries interests of the Sauk-Suiattle Indian Tribe, the Upper Skagit Indian and the Swinomish Indian Tribal Community. When the Upper Skagit Tribe withdrew from the consortium in 2004, the name changed to Skagit River System Cooperative and the consortium continued to represent both the Sauk-Suiattle and Swinomish Tribes. Its staff of almost thirty scientists focus on fisheries management, restoration, and research issues affecting the Tribes' treaty right to fish in the Skagit River Basin and those marine waters within which the Tribes have usual and accustomed fishing grounds.

[2] As mentioned in my declaration, this article won a citation by the American Fisheries Society for the Most Significant Paper in the North American Journal of Fisheries Management for 1994.

In contrast to the above photograph, the next photograph which is of an unnamed tributary to the Nooksack River, shows a culvert with adequate substrate within the culvert (enlarged version attached as Attachment F hereto).

3. **Reduction of Food Supply.** Culverts reduce food production due to the loss of riparian vegetation within the culvert footprint as a source of terrestrial insect input, and as well as a result of diminished sunlight within the culvert which is an important component to aquatic insect production.

4. **Changes in Stream Velocities.** Undersized culverts create an upstream low velocity area during high flows which may result in unnaturally high rates of gravel accumulation. Lower water velocities cause gravels to be deposited rather than being exported downstream unimpeded. This deposition is quite unstable, and in addition to attracting fish to spawn within this unstable area, may direct streamflows towards the streambank rather than the main channel. These redirected flows have the potential to increase streambank erosion.

5. **Maintenance Impacts.** Undersized culverts frequently require maintenance that can have devastating impacts of salmon. Undersized culverts can fill with sediment following storms. Dredging is often required to open up the culvert and provide space within the culvert to allow water to freely flow. This dredging is not limited to the footprint of the culvert, but frequently extends for a considerable distance both upstream and downstream of the culvert.

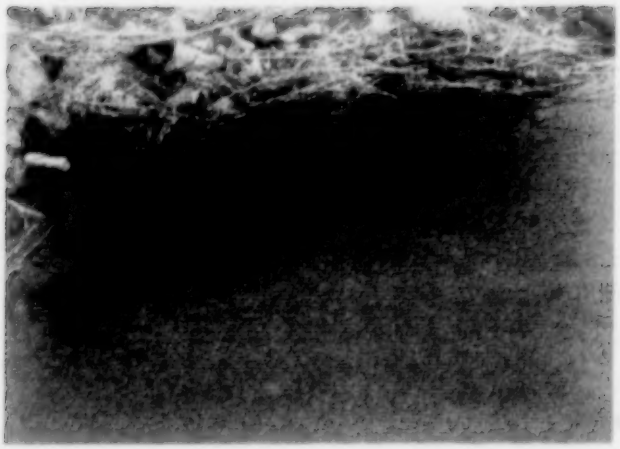
Channel migration, which refers to the lateral movement of water within the valley bottom of a stream, is a natural occurrence that is important to sustain salmon habitat. In addition to dredging to maintain adequate flow capacity within the culvert discussed above, streams frequently are dredged to ensure that stream channel migration does not result in the stream eroding the road prism rather than going through the culvert. These dredging operations destroy existing salmon habitat by removing in-channel woody debris and a natural pool riffle stream depth sequence, both of which are important for salmon rearing.

Red Cabin Creek provides an example of these problems, both from a fish passage standpoint and an ecosystem function standpoint. The following series of photographs show Red Cabin Creek following a storm event (enlarged versions attached as Attachments G-K hereto). The culvert is completely filled with sediment. When this occurs, as it does in some years, water and fish run over the road, and fish cannot easily pass downstream. These series of photographs show the following:

The photograph below (Attachment G hereto) shows the culvert filled with sediment in December 2004 prior to dredging.

The photograph below (Attachment H hereto) shows a similar occurrence in on February 20, 2009

The photograph below (Attachment I hereto) shows the blocked culvert at the downstream end of the culvert



The following photograph (Attachment J hereto) shows the culvert at Red Cabin Creek after the streambed has been dredged.

The following photograph (Attachment K hereto) shows a number of dead unspawned salmon stranded as a result of Washington State Department of Transportation dredging activities whereby fish were attracted to the excavated area and could not escape once flows diminished. (Personal Communication, Keith Wyman.)

The final photograph of Red Cabin Creek (Attachment L hereto) shows that on closer inspection, not only there a number of dead adult salmon, but numerous juvenile salmon that have been stranded (and subsequently died) as a result of the WSDOT maintenance activities. (Personal Communication, Keith Wyman.)

The undersized culvert in Red Cabin Creek has a number of impacts on fish. When sediment accumulates, salmon frequently spawn in the aggraded streambed. Subsequent dredging activity by WSDOT eliminates the salmon nests. The excavation by WSDOT is

undertaken to remove sediment to allow water to freely pass under the road. Unfortunately, the excavation creates a hole that fills with water and attracts both adult and juvenile salmon when stream flows dropped in the fall. These photographs show salmon which were attracted to the excavated area and could not escape once flows were further reduced in 2004. Had this culvert been properly sized, no excavation would have been necessary, and salmon would not have been attracted into the hole to later become stranded and die. The loss of these fish in this manner could have been avoided.

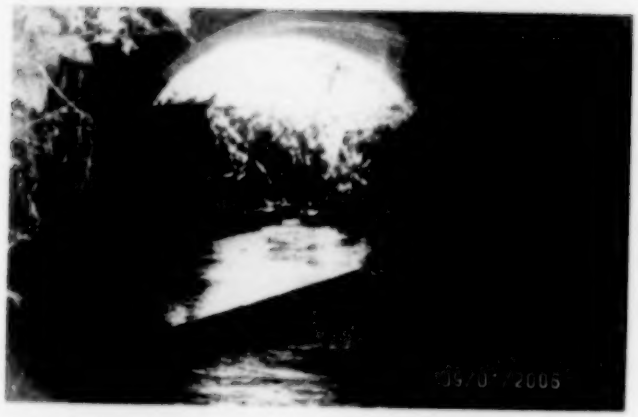
While these photographs show the impacts from maintenance dredging in 2004, it is not an isolated incident as WDFW biologist Kurt Buchanan recognized. Buchanan advised both his department and WSDOT of "the ongoing damages caused by the SR 20 culvert and dredging required to maintain it. . . . The documentation of fish damage is likely to increase, not decrease." Email from Kurt Buchanan to Greg Hueckel and Pat Chapman, with copies to Bob Bicknell, Craig Olds, Gayle Kretsman, Rich Costello and Rich Johnson dated 12/6/2004 (Attachment M hereto). Mr. Buchanan described the "negative impacts of long-term dredging" in an attachment to his Email, specifically reporting "emergency dredging is likely to occur in 04/04-05—the culvert and creek channel are nearly full again. Flagged redds are within the normal dredging area. The culvert and channel cannot be dug without destroying the redds already in place." As early as 2002, this culvert has been known to be a problem. As WDFW stated in the Hydraulic Project Approval issued for Red Cabin Creek maintenance activities by WSDOT: "Repeated maintenance dredging of this stream by the Washington Department of Transportation (WSDOT) constitutes an unacceptable adverse impact to fish life. The Department of Fish and Wildlife (WDFW) views replacement of this crossing, with the appropriate sized bridge or other approved structure, as the preferred alternative to dredging." Hydraulic Project Approval dated August 19, 2002 (Log # 97-F0760-03) issued (Attachment N hereto). Despite knowing about the adverse impacts to salmon as a result of an improperly sized culvert for at least 7 years, at the time of this report the original culvert is still in place and maintenance dredging with the ensuing impacts has continued.

The following two photographs of Bruce Creek, a tributary to the Nooksack River, demonstrate a culvert blocked by sediment and the loss of riparian and instream habitat after dredging had occurred to remove the sediment (enlarged versions attached as Attachments O and P respectively).

6 **The movement of wood, water and sediment is impeded.** Culverts may impede the movement of water, sediment and wood and each can have devastating effects on salmon habitat. If water, wood or sediment cannot adequately pass

through a culvert, the culvert may become plugged. If the culvert becomes plugged, the upstream hillslope may become saturated, and if that occurs, it may lead to a landslide or road failure. Alternatively, a plugged culvert may develop a debris torrent, which results from the impounded water and sediment associated with the plugged culvert overwhelming the culvert similar to a dam break. In either instance, the culvert becomes overwhelmed and there is a tremendous and rapid release of wood, water and sediment sent cascading downstream and depositing sediment, flooding the stream, and unleashing significant erosive forces. The effects on fish populations can be devastating. Both landslides and debris torrents can inundate salmon habitat for thousands of meters downstream of a blocked culvert. Undoing these effects and restoring the habitat can take many years and millions of dollars.

The following photograph of a beaver dam constructed on a culvert located on Bear Creek in the Nooksack watershed is an example of how culverts may become blocked (enlarged version attached hereto as Attachment Q hereto).



The recruitment of wood that can accrue from a long distance upstream of a culvert and be transported far downstream can be impeded by an inadequately sized culvert, and this loss of downstream wood can significantly reduce salmon production. The legacy of logging, agriculture, and development has resulted in severe reductions in mature streamside vegetation. Much of the most intact riparian vegetation is found in the upper portions of watersheds. If fish passage structures are not sized to accommodate the transportation of wood, in addition to increasing the possibility of landslides and debris torrents, they retard the movement of wood to downstream salmon habitats, which as I describe earlier in this report is so critical to salmon.

VI. REASONS REPLACING CULVERTS TO PROVIDE FISH PASSAGE AND RESTORE ECOLOGICAL FUNCTIONS MAKES SENSE.

As commonly recognized by fisheries biologists and as stated by Brett Barkdull, WDFW fish biologist, "Correction of human-made fish passage barriers is one of the most cost effective methods of salmonid enhancement and restoration." Barkdull, Brett. January 2001. Owl Creek Fish Passage Assessment. p. 1. Roni, *et al.* (2002) found that "reconnecting isolated off-channel habitats or blocked tributaries provides a quick biological response, is likely to last many decades, and based on available evidence, has a high likelihood of success. Generally, these types of restoration activities should be undertaken before methods that produce less consistent results." The replacement of barrier culverts is also cost effective and generally accepted restoration action. The benefits associated with replacement of inadequately functioning culverts are as follows:

A. Immediate Access to Additional Habitat.

Bennett *et al.* 1998 shows that providing fish passage increases the availability of habitat. An increase in habitat decreases density, and therefore increases survival and smolt production. Culverts provide immediate access to additional habitat, thereby increasing survival. (Pess, *et al.*, 2003; Pess, *et al.*, 1998; Barkdull, 2001). The benefits, therefore, are immediate, as compared to other types of restoration efforts that might take years to have an effect, such as riparian planning. Beechie, *et al.* (1994) showed a significant impact on Skagit River coho salmon production resulting from fish passage barriers, particularly in the tributaries. Removal of these obstructions could significantly increase salmon production in the basin. Pess, *et al.* (1998) showed over 250 adult coho salmon were observed above corrected barriers for each of the first two years following culvert replacement.

B. Higher Level of Confidence in Design.

In contrast to other salmon restoration efforts, the science about moving fish upstream is more developed. Although there are uncertainties about passing juvenile fish upstream that should be evaluated through adaptive management, the state of knowledge about fish passage and culvert design is such that we have the ability to design crossing structures, *e.g.*, bridges and culverts, with a high level of confidence such that they will allow adult fish to have unimpeded passage at most flows where fish need (or seek) passage.

C. Easier monitoring.

Monitoring for effectiveness of culvert replacement is much easier than for many other types of habitat restoration efforts. Culverts that were complete blockages to migrating adult salmon can be readily sampled to determine if salmon are present where prior to replacement they did not exist. Estimates of densities or presence of juvenile salmonids can be readily monitored as well. The same can be said for measuring the physical results of culvert replacement. Habitat measurements can be confined to a relatively small portion of stream length, and the number of parameters to be measured, *e.g.* slope, presence of substrate within the culvert, and impacts to upstream and downstream portions of the stream channel, can be rather limited and well defined.

D. Minimal Impacts on Land Use or Private Rights.

The installation of a culvert generally requires little changes in surrounding land use. The footprint for the installation is generally within existing rights of way, so impacts to private landowners are minimal. This avoids the political or social challenges that often occur when attempting to implement restoration projects that require changes in the activities or properties of affected landowners. Replacement of culverts is generally well accepted by the public as a cost effective measure for salmon protection and restoration.

E. Cost-Effective Strategy.

Culvert replacement has been shown to be a cost effective strategy for the recovery of salmon populations. In evaluating restoration actions, Beechie *et al.* (1996) report:

> removal of access problems (*e.g.*, impassable culverts) appears to be the lowest cost restoration, because an access problem is localized and relatively easy to restore, and smolt production increases are relatively large and immediate.

This conclusion was based on an analysis that evaluated the cost per smolt produced by culvert replacement, construction of groundwater channels, or the introduction of large woody debris structures. Culvert replacements were found to be from 1.7 to 29 times more cost effective than these other two restoration actions.

F. Benefits Throughout Stream System.

The benefits of replacing culverts that are compromising ecological functions such as impeding the movement of wood, water and sediment, extend far beyond the immediate area of the culvert. The avoidance of a debris torrent that might occur because water, wood or sediment cannot pass through a culvert during a storm, has benefits throughout the stream system, and the cost of protecting salmon habitat outweighs costs of restoration both in terms of dollars spent and time necessary for recovery. (Beamer *et al.*, 1998.)

VII. TRIBAL EFFORTS TO PROTECT AND RESTORE SALMON

For many years, the case area Tribes have dedicated a significant amount of time and resources toward the protection of salmon resources. There has been a long history of Tribes working collaboratively and within the confines of both State and Federal law to protect Tribal resources. Some of these collaborative efforts are:

A. Timber Fish and Wildlife and Forest and Fish Program.

This program is an intertribal effort to work with the State of Washington, small and large timberland owners, and the environmental community to protect fish and wildlife resources from the impacts of forest practices activities.

B. Water Resources Forum.

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
IN SEATTLE

UNITED STATES OF AMERICA, et al, Plaintiffs, v. STATE OF WASHINGTON, et al., Defendants.	No. C70-9213 Subproceeding 01-10

TRANSCRIPTS OF PROCEEDINGS

BEFORE THE HONORABLE
RICARDO S. MARTINEZ

October 14, 2009

[Original Page 33]

couple of questions of this witness.

Mr. McHenry, understanding that I've not yet had a chance to review your declaration, you've testified that habitat restoration is a very complex thing. Prior to this litigation beginning, the Lower Elwha Clallam Tribe realized that it needed to do something to address these restoration efforts, correct?

THE WITNESS: Yes, sir.

THE COURT: As you have testified, and as the cross-examination showed, there are many specific areas that could have been addressed as part of that ongoing effort.

THE WITNESS: Yes, sir.

THE COURT: Given the obvious limitation that there are insufficient funds to do everything necessary, your tribe decided to go ahead and fix or address -- try to fix 17 barriers out of the 31 that have been identified in this area?

THE WITNESS: In the Salt Creek watershed, that's correct.

THE COURT: Out of all the things that could have been done, why did they decide to try to fix the barriers as one of their highest priorities?

THE WITNESS: Because when we did the watershed assessment, we found that there were 50 miles of historically active stream that salmon could access in this watershed, and fully half that mileage was blocked by culverts of various ownerships. So to us, we applied our scientific knowledge,

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recommendations from the literature which indicated that when you're going to restore a place like this, you need to go after the barriers first.

THE COURT: In your expert opinion, that was the biggest bang for your buck?

THE WITNESS: Yes.

THE COURT: Thank you.

THE WITNESS: Thank you.

THE COURT: Ms. Foster.

MR. FOSTER: Thank you, your Honor. Yesterday, your Honor, the Court reserved ruling on AT-004 with regard to the last section of that particular report.

THE COURT: It was actually Pages 12 and 13, the culvert correction success, that the State had objected to.

MS. FOSTER: Yes, that's correct.

THE COURT: After listening to the testimony, Counsel, the Court will overrule the objection and will admit those portions.

MS. FOSTER: Thank you very much, your Honor. I also neglected to move for AT-084, which is a hydraulic permit approval, during Mr. Wasserman's testimony, and would so move now.

THE COURT: Is that AT-008-4?

MS. FOSTER: No. It's AT-084.

THE COURT: The Red Cabin Creek?

October 15, 2009

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THE COURT: You may inquire, Counsel.

DIRECT EXAMINATION

By Mr. Nielsen:

Q Mr. Johnstone, where do you live?

A I live at Tahola, Washington, on the Quinault Indian Reservation.

Q Where is the Quinault Indian Reservation located?

A It is just north of Grays Harbor in the mid Washington coast.

Q Are you an enrolled member of the Quinault?

A I am an enrolled member.

Q How old are you?

A I'm 56.

Q Are you a descendent of any of the signers of the treaties?

A Yes. My grandmother was from Hoh River, and our family on the Hoh River side were the treaty signers.

Q And Mr. Johnstone, what do you do for a living?

A I'm a fisheries policy spokesperson for the Quinault Indian Nation.

Q And can you briefly describe in general terms what that means. What is your job? What do you do?

A Well, it generally means that anything that has to do with policy in the fisheries arena, that's what I do. I work directly with the fisheries division and handle any of the policy issues.

Q When you say you work directly with the fisheries division, what is the fisheries division?

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A Yes. When I talk about my Hoh River family, it's exclusive, the only income that my brother-in-law has ever known, and he's 73 years old. It was his entire life.

Q Are there tribal members now who rely on salmon fishing to support themselves economically?

A In the Quinault Tribe, there are several.

Q And does your family still rely on salmon as a source of economics?

A Very much so. I have nephews that fish full-time and work, I guess seasonal work when it's available.

Q Now, in Quinault practices -- well, first off, are you familiar with the role salmon has played in the Quinault culture and tradition?

A Well, in our language, the word for "salmon" is the equal word for "food." It's very much a part of us as Indian people. The salmon were the buffalo of the great plains when there were 60 billion. You know, salmon are our buffalo. It is intertwined within our culture. Our songs, our ceremonies, our subsistence coincide with the salmon. When salmon are not plentiful, we suffer. When salmon are plentiful, we basically are rejoicing, we're happier, but we're also mindful of what that means to us. It means that when they're plentiful, that you take care of your harvest, you take care of your needs, your smoke and your can and your freezing, all of those things. And always, we take care of our elders. We take care of

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those that can't provide for their selves first and foremost: our babies, our grandmothers, our grandfathers and our children, and our elders. That's just the way Indian people are.

Q And salmon is an important part of taking care of the children and the elders?

A Yes, it is.

Q And you mentioned ceremonies. How in Quinault culture is salmon used ceremonially? Can you give us a brief description of that?

A Well, salmon are used in all events as well as all of our foods. Salmon is the center pin, for instance, of our culture. If you look at Quinaults, we have a particular stock of salmon called the Quinault Blue Back, or the Sockeye. It's a Sockeye salmon. It is known actually throughout the world.

It is basically the foundation of who we are. We're talking about a run of fish that once numbered into a million. In the last century, there were runs of a million fish. In the last seven years, we had the lowest run ever recorded, at like 7,200 fish. So our connection is deep. The relationship to the salmon is ever present.

And we use salmon for name givings. We use salmon for deaths, for burials, for recognitions, for birthdays. Ceremonial events, we would use particularly the Quinault Sockeye.

Q When you testified that -- I think you said Blue Back; is that correct?

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these projects, about $280,000, that's certainly an order of magnitude below what these DOT projects are costing today.

Q You mentioned prioritization and the development of the prioritization process and the manual.

Why is it important to prioritize culverts for correction?

A Well, we felt it was important so that -- front load benefits. We knew that some projects, you would gain

more fish or access for more fish, so that would be one aspect of prioritization.

There are other aspects of how much it would cost to correct a project, the status of the stocks that were effected, the mobility of those stocks when you were dealing with anadromous fish or only resident fish. So these are all factors that we felt needed to be in the prioritization process.

It basically was a surrogate for a cost benefit, but we felt it did a better job of prioritization than a formal cost benefit analysis.

Q You testified a bit this morning about the Fish Passage Priority Index, and you described a little bit about your role in developing that. I would like to go into a little bit more detail.

What is the Fish Passage Priority Index?

A Well, it is a unique number that is calculated for each barrier culvert. And what that lends itself to is a comparison of numbers from other barriers. The range that is expected with

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utilization of priority index is 1 to 100. The higher the number, the higher the priority. There are six factors within the priority index. I think I alluded to some of those in general terms.

Basically there are three modifiers within the priority index for each species. That is the cost stratification of the project, to correct it; the status of the stocks, whether they are depressed or not; again, whether they are anadromous or not.

And then critical pieces of the priority index are the first three factors. I used the BPH. The BPH represents B, being the passability of the culvert, a rough approximation of that; P, the productivity capability of the species that is being calculated, those being different for each species; and then the habitat that a species would utilize after the correction is made.

Those factors are multiplied together. There's a quadratic root calculated for those factors for each species. And then once those are calculated for each species within a drainage, then those are added together to give you the final PI number for that crossing.

Q How does the Washington Department of Fish and Wildlife collect the information necessary to collect to compute a priority index number for a culvert?

A Well, we've had inventory crews. And those that were inventorying DOT roadways, we receive money from the Department of Transportation to do that work. And basically what starts out

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as a driving roads, looking where those crossings are, looking at the site, taking measurements, assessing whether the facility is a barrier or not.

If it's determined that it's a barrier, secondly, then determine if there's a significant amount of habitat that the barrier's affecting that is 200 meters upstream and downstream.

Once that threshold is met, then an in-depth habitat survey is done where various measurements

are made of the habitat to determine the habitat that is unique to each species being affected.

Q Once you've assembled all that information, what do you do with it?

A Well, through the help of my staff, we developed a database to compile all that information and do the calculations of the priority index. It resides in what is called the Fish Passage and Diversion Screening Inventory Database. That's undergone several names. At one time, it was called SHEAR base.

But all the data for the inventory crews in Fish and Wildlife are compiled there. All of the inventories that we did for counties, the data resides there. And also if we provide technical assistance to grant groups that secure money through the SRF Board, those data also reside there.

Q When you calculate a priority index number for a culvert, do you account for the presence of other fish passage barriers in a watershed?

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A We account for it only insofar as it's recorded as reach breaks in our habitat surveys. When the priority index is calculated, it treats those other barriers as transparent. The reason we do that, we don't know when those other barriers are being corrected. So by treating them as transparent, you do a priority index that looks at potential habitat gain as if all those barriers would be corrected at some point in time.

Q And by "transparent," what do you mean?

A What that means is if you're walking the watershed, and perhaps there may be ten barriers, to look at the total potential, you walk the whole stream past every one of those barriers measuring the habitat, and those become an integral part of the priority index. If you didn't do that, you would only calculate a priority index up to the next barrier, and then you would stop your survey. That wasn't our intent, because that's drawing a conclusion that that next barrier and the eight after that would never be fixed.

Q Optimistic way of looking at things.

If we fix a fish passage barrier culvert in a watershed that has other barriers upstream, will the potential benefit of fixing that barrier be immediately realized?

A Generally no.

Q Why not?

A Well, if you open the habitat and the fish start utilizing or passing the previous barrier, they're going to butt up against,

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in some magnitude, to the next barrier. And of course the amount of that decline in potential production depends on the degree of passability of subsequent facilities.

Q I think you testified you worked for the Washington Department of Fish and Wildlife a little over 25 years?

A That's correct.

Q Why did you stay so long?

A I knew you were going to ask that. I guess the short answer is I just really enjoyed working with people and supervising people that were extremely dedicated to protecting and enhancing the resources of the state. It would have been a very difficult job had you not had good staff working for you to implement good ideas, I guess act as you in your own ideas. It made it real easy.

Q Are some of your staff in the courtroom today?

A Yes, they are.

MS. WOODS: Thank you.

THE COURT: Counsel, before you start, let me ask him one question that may help you also in your cross-examination.

Dr. Sekulich, I haven't read your direct testimony as of yet. But in all the years and all the work that you did, in looking at how to address this very complex problem that everybody wants to fix, if Mr. Monson's client over there came up with a pot of stimulus money, a big pot, would you do anything different than the way you've set it out?

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THE WITNESS: In terms of the prioritization?

THE COURT: I don't want to make you nervous over there.

Yes.

THE WITNESS: No, not in terms of the prioritization method.

THE COURT: Thank you.

You may cross-examine.

MR. SLEDD: Thank you, your Honor.

CROSS-EXAMINATION

By Mr. Sledd:

Q Good afternoon, Dr. Sekulich.

A Good afternoon.

Q I'm John Sledd. You'll probably remember we first met underneath the conference table during the earthquake at your first deposition?

A I think Mr. Hallowed was taking pictures.

Q The infamous cellphone pictures.

When you were employed at WDFW, you supervised a unit that goes by the acronym of SHEAR; is that correct?

A Yes. That was a name I coined when I first took the job in habitat management.

Q Can you spell it and tell us what it stands for?

A It started as S-H-E-A-R, which was Salmon Habitat Enhancement and Restoration. That's when we were then the Department of Fisheries and our responsibility was only for salmon.

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Q And then in your last year or two with the State, there was some reorganization of the SHEAR program. It sort of morphed into the habitat and passage project section of the technical applications division; is that correct?

A It did. There were some intermediate steps before then.

Q And the SHEAR program, when you were directing it, you produced an annual report, did you not, to describe the activities of the program?

A We didn't start the annual reports until probably the mid '90s, but there were other reports that we jointly did with the Department of Transportation.

Q But there those annual SHEAR reports, for example, in 1997 to 2001 or so --

A That sounds right.

Q And then after the name change, when that became part of the technical applications division, the habitat and passage project section, did that annual reporting continue until you left the department?

A Yes.

Q And you supervised the preparation and did a good bit of work on each of those annual reports?

A Yes. Most of the work was outlined, directing staff to complete portions of the report. That's correct.

Q Now, you started doing habitat work at DFW, I believe you testified, in 1990?

[Original Page 121]

A Actually, it was 1991.

Q And it's your opinion, is it not, that prior to your starting your tenure with the DFW, or the Department of Fisheries, a significant portion or most of the culvert structures that were installed in the

state were barriers from the minute they were installed; is that not correct?

A I believe there was a significant number that were.

Q And that opinion's based on your personal observation of culverts as well as input from your staff while you were with DFW?

A That's correct.

Q The 1990 MOU, Exhibit W-087-B that you were asked about, that didn't enable DFW to do anything that it couldn't have done before, did it?

A No, it didn't.

Q Because, as I believe you say in your declaration, there have been fish passage laws on the books in the state of Washington since the late 1800s.

A That's correct.

Q The 1990 MOU just profiled the need and raised people's awareness of those laws; is that correct?

A That's correct.

Q If you could take a look at Exhibit 87-B. If you could look down at the bottom of the first page. You should see there about four or five lines below the word "purpose," it says, " In order

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to accomplish this purpose, the respective participating agencies hereby agree as follows:"

And then after that for several pages there's descriptions of responsibilities. And to the left of each, there's an agency acronym; is that correct?

A That's correct.

Q And if we turn to the eighth page, in the lower right, there is a long number, T10 etcetera 40. It is the eighth page in.

There's a heading you should see in the middle of the page that says "Fish Passage Barrier Removal and Maintenance Program."

A I see it.

Q The first item under that heading states, "The Department of Transportation was to be responsible to," quote, "maintain culverts and fish passage facilities in a manner which provides continued fish passage for the life of the installation."

Do you see that?

A I do.

Q The Department of Transportation did not in fact maintain all its culverts and fish passage facilities to provide continued passage after this MOU, did it?

A Despite its best efforts, no.

Q As I understand the testimony -- you've been in the courtroom pretty much the whole trial, haven't you?

A I have.

Q There's been some discussions about DOT funding for

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corrections in reference to the I-4 program?

A Yes.

Q That's funding that is appropriated by the state legislature to the Department of Transportation specifically for fish passage barrier corrections, right?

A That's correct.

Q Now, the PI, or prioritization process that you just spoke about a moment ago, is used for prioritizing DOT corrections that are going to be funded with that I-4 funding, correct?

A That's correct.

Q It is not used for prioritizing corrections that are going to be done as part of a road project that happens to have a barrier in the project area?

A That's generally true, yes.

Q In that prioritization process for the I-4 funded corrections, is a culvert with less than 200 meters of upstream habitat treated differently than one that has more than 200 meters?

A In the inventory process?

Q In the prioritization process.

A Yes.

Q And the culvert with less than 200 is assessed, the data's kept in the data base, but it's not prioritized for correction with those I-4 funds?

A In general, that's true.

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Q But do you just write off that barrier and say, we're not going to fix it?

A No, we do not. It's kept on the databases of barriers with the presumption that when there is road work safety mobility projects, for example, that the fish passage barrier will be corrected concurrent with that work.

Q And the reason you do that is because biologically, even though it's a short amount, there's still going to be benefit from correcting that?

A That's correct.

Q In your declaration -- you've still got it up there with you, don't you?

A Yes.

Q Can we look at Paragraph 48? I'm sorry. You probably don't have it.

You state in Paragraph 48 that when DFW formulated its current fish passage regulations for culverts back in the 1990s, there was not much information available on the swimming abilities of juvenile salmon?

A I think I'm in the wrong place there. Is it 48?

Q Excuse me for a second. Sorry about that.

It states, "As of '94, little information was available about the swimming abilities of juvenile salmon, so we used a six-inch trout as the closest surrogate," correct?

A That's correct.

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barrier again, correct?

A Yes. You would want a monitoring program.

I might add to that, though, that the type of correction that you make would determine the, I guess, frequency that you would have to reinspect those facilities to see if they were still passing fish.

Q So if you used correction designs that minimize the chance for hydraulic changes to create an impassable condition, it could lower your monitoring burden?

A That's correct.

Q When I was asking you about the 1997 legislative task force report - or it may have been when I was asking you about the SHEAR reports - you mentioned a number of other reports done jointly with DOT. I want to ask you about one of those.

MR. SLEDD: Madam Clerk, if you could hand the witness Exhibit AT-54, please.

THE WITNESS: What was the number again?

By Mr. Sledd:

Q This is AT-54. It's a Fish Passage Program Department of Transportation Inventory Final Report.

A Can I just look at the screen?

Q That's absolutely fine. Whatever is easier for you.

Did your fish passage program work with DOT and prepare a series of not quite annual, but as time went on became more close to annual progress performance reports regarding the joint work

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between DFW and DOT regarding DOT culverts?

A Yes, we did.

Q And this is one in that series of reports?

A Yes.

Q And if I am correct, it has already been admitted in evidence.

You approved the content of these reports when this were prepared by staff under your supervision?

A That's correct.

Q If we could turn to Page 3 in the final report, the first paragraph. Four lines down there, it states, "One habitat-related cause for weakening of salmonid production, which can be easily resolved, is human-made barriers to fish migrations caused by improper placement of road culverts."

Do you see that?

A Yes, I do.

Q By that statement that it is easily resolved, what you and your staff meant was that fish passage barriers were easier to fix than those habitat problems described in the previous paragraphs, such as hydropower, habitat degradation, easier to deal with than oceanic events; is that correct?

A That's correct.

Q If we could look to Page 2, please, in Exhibit AT-54. In the third paragraph on that page, the next-to-the-last sentence -- are you with me?

[Original Page 132]

A I think so. On my screen here -- is it the last full paragraph?

Q Yes, it is.

A Okay.

Q The next-to-last sentence in that last full paragraph on your screen states, "A total potential spawning and rearing area of 1.6 million meters squared," and some change, "is currently blocked by WSDOT culverts on the 177 surveyed streams requiring barrier resolution. This is enough wetted stream area to produce 200,000 adult salmonids annually."

Now, you were the major player in preparing that statement and doing those calculations, were you not?

A Yes, I was.

Q And those calculations are based on the percent passability, or B factor, the P or production factors, and production coefficients, and the H, or habitat values, that are described in the priority index?

A With the understanding it is all under the umbrella of potential production.

Q Correct. So that is the potential annual adult equivalent salmonid production?

A That's correct.

Q An adult equivalent means that's a fish that actually would end up in either harvest or escapement as an adult?

A That's correct.

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Q So that it's after ocean mortality and other mortality factors?

A Yes.

Q You included that statement about the 200,000 fish in this final report in order to convey to the state

legislature that there was a real benefit to the money the legislature was appropriating for culvert corrections, was it not?

A That's correct.

Q And I believe your declaration describes these factors in the PI and the BPH combination as being properly used only in a relativistic sense, to compare the benefits between one project and another?

A For that purpose, and also to compare correction schedules, where it's still a relative comparison.

Q This 200,000 additional salmon statement was not comparing the relative benefits of two projects, though?

A It was not, but it was a result of a cost benefit analysis that I did at that time.

Q But it was not comparing two different projects?

A No, it was not.

Q And it was not comparing two different schedules?

A No. It was a result of such analysis.

Q But it's not stated in the report?

A That's correct.

Q You said this is an outgrowth, I believe, of a cost benefit

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analysis?

A That's correct.

Q And you did that analysis?

A Yes.

Q But in your opinion, it's impossible to do a cost benefit analysis on a single culvert and determine what the benefit of the fish coming back to a single correction is?

A I don't think it's impossible, but it's very difficult.

Q Dr. Sekulich, I'm going to read to you the question and response from your deposition of April 22nd of 2009, Page 69 at Lines 3 to 9.

Question: "So the legislature, you think, wanted a project-by-project cost benefit?"

Answer: "Yes."

Question: "And you didn't think that was possible?"

Now, if you wanted to do a cost benefit on the overall programatic level, not individual culverts but the whole correction program, you believe you could do that?

A I believe it's much easier and it makes more sense.

Q And if you wanted to do that, you don't know of any better method to do than the BPH method, the percent passability, the cost of production coefficient times the habitat areas, do you?

A In my opinion, on an individual project, the priority index methodology is the best.

Q And if you want to prepare an estimate for the entire

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program, you don't know of a better methodology than that?

A Than the priority index methodology or the cost benefit analysis?

Q Than the BPH methodology that's a portion of the priority --

A It's a portion. I think it's a good methodology, yes.

Q And you don't know of a better one to come up with a cost benefit for the entire --

A Not without thinking about it more, no.

MR. SLEDD: If we could have on the screen, please – if I could have the clerk deliver to Dr. Sekulich Exhibit AT-154?

I'm sorry, your Honor. It's not admitted yet, so perhaps I should have it on the screen and not publish it to the witness.

By Mr. Sledd:

Q I'll botch this, but it's my last question.

A Are you hoping it's a good one?

Q It's a doozy.

Do you recognize that document, Dr. Sekulich?

A I do.

Q And it has your name on it underneath the title, correct?

A Yes.

Q And is that a document that -- the date down there, November 9th, 1999, do you see that?

A Yes, I do.

Q And that was during your tenure with the Department of Fish and Wildlife?

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it, in addition to the information about the designs of these projects.

THE COURT: Thank you, Mr. Shaftel.

Let me ask a couple of questions, Mr. Wagner. Looking at 092. Not the one on the screen, 113, but 092, this is the earlier version you've indicated?

THE WITNESS: That's correct.

THE COURT: Mr. Shaftel says that 113, the one on the screen, was not available to you at the time your declaration was put together.

THE WITNESS: That's right. This is an update to those cost estimates.

THE COURT: Who creates this document?

THE WITNESS: This table itself is created as a summary by my staff.

THE COURT: Your staff?

THE WITNESS: Yes.

THE COURT: All right, gentlemen. The Court will overrule the objections, and 113 will be admitted.

By Mr. Shaftel:

Q Now, Mr. Wagner, I'd like to ask you a couple questions about the scoping that's reflected on this particular document. Why did we do all this scoping?
A Scoping is very important to get a handle on what the costs would be as well as to get agreement on the type of fix. Our

[Original Page 26]

intent here is -- as I mentioned, the fish passage program has evolved as we've worked to improve it over the years. One of the things that we're working on is to really emphasize scoping so that we have more projects that can move on to design and more projects that are ready for construction ultimately.

Q And do you know how many projects -- I'm sorry. Is this a comprehensive list of everything in the scoping process?

A No, it's not. We have scoping -- projects that are in the scoping process that haven't been brought to the completion that these have, and we also have projects that have been scoped in other geographic areas.

Q And do you know how many projects were listed on this particular scoping list?

A It says 38 projects.

Q Have you calculated what the average cost reflected in the "Estimated Cost" column is?

A Yes. The average cost of all those 38 is about $3 million.

Q And I notice there's one project on here that seems quite a bit higher than the rest. It's SR 3 Chico Creek at $29 million. Have you also done a calculation that would remove that extremely higher cost?

A It is a very high-cost project. If we took that out and averaged the remaining 37, it would be an average of $2.3 million apiece.

Q And how do you think this sample of approaching projects

[Original Page 27]

compares to other remaining projects that have yet to be scoped but would still need to be corrected by the Department of Transportation, in terms of the size of the projects?

MR. JOHNSEN: Objection, your Honor. This is beyond the scope of anything in his declaration. His declaration is his testimony. It is not a summary.

MR. SHAFTEL: Your Honor, I believe he talks about costs and how they've changed over time. He talks about the number of barriers that are remaining. He's just merely -- trying to provide context for this particular document and the costs reflected.

THE COURT: Overruled.

You may respond. Do you do you remember the question?

THE WITNESS: Could you repeat that, please?

MR. SHAFTEL: Yes.

By Mr. Shaftel:

Q How does the averages that you just mentioned -- or, I'm sorry, how does the list that you see here and the size of the projects reflected here compare to the size of the projects that have yet to be scoped or

corrected but still need to be corrected by the Department of Transportation?

A I think these are pretty typical of projects that we are scoping now and have not concluded the scoping to. We are definitely finding as we go into our list we are adding more and more complex projects, and there may be a number of very high

[Original Page 51]

mischaracterizes Dr. Sekulich's testimony. I believe he said some of them may have been. I don't believe he said almost all of them.

THE COURT: The objection to the form of the question is sustained.

By Mr. Johnsen:

Q Do you recall Dr. Sekulich testifying about fish passage barriers in the case area last week?

A I do.

Q Do you disagree with any part of Dr. Sekulich's testimony regarding the passability of Department of Transportation culverts in the case area in the last week?

MR. SHAFTEL: Objection. Overbroad.

THE COURT: Overruled.

THE WITNESS: Not that I can recall.

By Mr. Johnsen:

Q Going back to Page 5 of your declaration, Paragraph 9. This, I think, is just a clarification point. You make reference in that paragraph to the industry -- it is right at the bottom, Line 26, the industry standard for

the design of road culverts for hydraulic purposes. Do you see that?

A Yes.

Q In making that statement, are you using the word "hydraulic" there in the sense -- the ordinary sense of conveying liquid

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through a pipe, rather than referring to the hydraulic method of designing culverts?

A That's correct.

Q So you are not saying that the manual that you are referring to in Paragraph 9 contained any direction on how to construct a hydraulic fish passage culvert; is that correct?

A That is correct, I am not saying that.

Q And isn't it also true that the standards for fish passage that the Department of Transportation uses are set by the State of Washington Department of Fisheries and not by the Federal Highway Administration?

A That is correct.

Q Turning to Page 9. On Page 9, you are talking about the inventory of the Department of Transportation culvert sites. And you testified about that some this morning as well. You state there that the inventory is now complete; is that correct?

A That's correct.

Q Although the inventory is complete, habitat assessments still must be completed on a majority of

the department's fish passage barrier culverts; isn't that also correct?

A That's correct.

Q Is it true that about two-thirds of the culverts remain to have habitat assessments on them?

A I believe that is about the number, yes.

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Q Now, you testified earlier this morning about the scoping process. Do you recall that?

A Yes.

Q And you said that a portion of that process involves coming up with estimates of possible project costs. Is that also correct?

A Yes.

Q And isn't it true that those estimates are not done with the same rigor that would be done if the project was being put out to bids, for example?

A I'm not sure about the word "rigor" in that. They're for different purposes. The scoping estimate is a rough estimate. It's based on engineering principles, but it doesn't involve the detailed analysis that would --

Q Right. So it's a rough estimate compared to the actual estimate that an engineer prepares when a project is going to be put out to bid by the State Department of Transportation?

A Yes.

Q And in fact, in the scoping process, those estimates are used primarily for comparison purposes when

you're comparing the different possible solutions to the problem that's presented? Isn't that also correct?

A They can be used that way.

Q So if you are considering a retrofit, what's the rough cost of that compared to a rough estimate of the cost of a bridge or a

[Original Page 54]

stream simulation culvert, people come up with numbers for that; is that correct?

A Through the scoping process.

Q Right.

Now, I think you testified that there are some 32 projects in the Scoping Summary Report that's Exhibit 113.

MR. JOHNSEN: Could you put up W-113, please? Did I get the number wrong? It's the one we substituted for 92-J.

THE COURT: Counsel, this might be a good time for our morning recess.

MR. JOHNSEN: Thank you.

THE COURT: We will take our morning recess.

(At this time, a short break was taken.)

By Mr. Johnsen:

Q Mr. Wagner, in front of you on the screen is the second page, the exhibit that we were talking about prior to the break. And this is the page where I believe you testified sets out the barrier culverts that have been scoped for correction in the case area; is that correct?

A Yes. These are projects in the case area where we've completed the scoping process. I can't see the whole document here.

Q That's so we can read the part that is here.

A Okay.

Q You have, I believe, access to a paper copy, if you prefer

[Original Page 59]

A Okay.

Q So 38 of those are shown on the exhibit that's on the screen in front of you; isn't that correct? That's your count?

A Yes.

Q You testified that you felt these 38 were a representative sample of the 800 that remained to be corrected. Do you recall saying that?

A Yes.

Q What did you base that testimony on?

A On my general awareness of these projects and on the discussions we have had about the scoping effort with my staff and with the Department of Fish and Wildlife staff.

Q You have available to you in the course of your work access to the Fish Passage Diversion Screening Inventory Database, do you not?

A We use that database. I don't personally run analyses on that.

Q That's a data base maintained by the State Department of Fisheries that includes all of the

Department of Transportation barrier culverts as well as information on other culverts; isn't that correct?

A Yes. Department of Wish and Wildlife, yes.

Q So when you reached your conclusion that you testified to here in court today in this case, did you consult that database to determine whether in fact these 38 projects are representative

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of the remaining 800, as reflected by the data in that database?

A If I'm understanding your question, you're asking me if we looked at that larger database to see if these are reflective of that?

Q Yes.

A I don't believe we've done that analysis.

Q Why not?

A We have been busy with other tasks.

Q Really?

Okay. Well, so you have a general feeling that this is consistent with those 800, but you haven't undertaken any kind of analysis of the data to support your opinion; is that correct?

A These projects represent a range of the stream conditions, streams of different sizes, different locations in the case area, different watersheds reflecting different levels of development, and so this list -- these are the kinds of projects that we're scoping, that are in the process of scoping now that

haven't reached completion, and my sense is that these are fairly typical of the types of projects we see.

Q Could you please answer the question that I asked?

A I'm sorry. I guess I need to have that question again.

MR. JOHNSEN: Can the reporter read back the question.

THE COURT: Actually, Counsel, I think he did answer it. Ask him another question.

By Mr. Johnsen:

[Original Page 61]

Q How many of the projects on the list here involve bridges?

A I don't know the number off the top of my head. We've indicated bridge corrections in the description of the proposed solution.

Q Scanning down through it, I see a 200-foot bridge, an 80-foot bridge, a 30-foot bridge.

Is it your opinion that the number of bridges that are reflected in this exhibit is representative of the number of bridges that will be required to address the 800 culverts that remain to be corrected in the case area?

A I'm not sure how to answer that question.

Q Isn't it true that the reason you can't answer it is that you haven't undertaken the analysis that would allow you to answer it?

A Well, a bridge is a method of correction that could be chosen at a number of different locations. A bridge is a specific kind of structure that could be used at a

number of spans. And so some of these projects where we say replace culverts with stream sim design, those may in fact be bridge projects as well. We could -- you know, it would be replaced with a bridge structure.

THE COURT: Mr. Wagner, I think the question was a lot simpler than that. There are bridges on this list of 38, right?

THE WITNESS: Yes.

THE COURT: And you said earlier that you thought this list was representative of the 800 that need to be corrected?

[Original Page 62]

THE WITNESS: Yes.

THE COURT: Do you think the numbers of bridges are also representative of that 800, the 38 on here, three bridges, roughly ten percent?

THE WITNESS: It's very possible, yes.

By Mr. Johnsen:

Q You have available to you through the database stream width measurements, do you not?

A Yes.

Q And those stream width measurements are a major factor in deciding the size of a culvert, or a bridge for that matter, that will be used to solve the barrier problem; isn't that also correct?

A Yes.

Q Isn't it true that the database indicates that approximately 80 percent of the current barrier

culverts could be addressed with a stream simulation culvert that is no larger than 16 feet in width?

MR. SHAFTEL: Objection. Foundation.

THE COURT: Are you referring to the Fish Passage Diversion Screening Database?

MR. JOHNSEN: Yes.

THE COURT: All right. Overruled.

THE WITNESS: I'm not sure about that. I would need to look at the database.

[Original Page 63]

By Mr. Johnsen:

Q And you have not done that in support of your opinion regarding these culverts; is that correct?

A No, sir.

Q If that is true, if 80 percent of the barrier culverts could be addressed with a stream simulation culvert 16 feet in width or less, is that fact reflected in this exhibit?

A I don't believe so.

Q And in fact, there is a much greater proportion in this exhibit of much larger crossings, is there not?

A Because we are working down the priority index, streams that are larger sizes are going to tend to have a higher priority.

Q And that makes this not representative of the future problem, doesn't it?

A Well, very often it may take a large structure to cross even a small stream, depending on the terrain,

the roadway, the depth of roadway fill and other factors that are the realities of the situation on the ground.

Q The projects that were done this past construction season, are they in fact all complete at this point?

A Some are complete. Some are still in their final stages with vegetation work and some other kind of final steps happening to them this fall.

Q Have they passed final inspection?

A They have passed the inspection from our construction

[Original Page 67]

Q Are you familiar with that culvert?

A A little bit. I haven't been to the site. Since it is not an I-4 project, I wasn't very involved with that.

Q Was it prioritized for correction?

A I believe it has a PI, yes.

Q And is it true that the contract amount for correction of that culvert in this construction season was $546,628?

A I don't know that for a fact.

Q Would you look at Exhibit AT-333, please? Do you recognize this document?

A I believe I saw this for the first time last night.

Q Right. Probably shown to you by Mr. Shaftel, correct?

A Yes.

Q I will represent to you this is a document that I found yesterday on the Department of Transportation's website and provided to Mr. Shaftel, indicating that it's a construction contract report for the Cougar Creek culvert replacement project that you referred to as being completed this year.

This document also shows an engineer's estimate, does it not?

A It does.

Q About $400,000 higher than the actual contract amount?

A That's right.

Q And you testified earlier that the sort of rough estimates that are involved in the scoping reports aren't done with the same level of rigor and analysis as an actual engineer's estimate

[Original Page 68]

when a project goes out to bid.

Do you recall that?

A Yes.

Q The Mosquito Creek project outside the case area but still a culvert that was repaired this season, are you familiar with that one?

A To some degree.

Q That was done under your program?

A Yes.

Q You are not familiar with the actual project?

A I am familiar with the project in general. I haven't been to the site, if that's what you're asking.

Q That's on US 101; is that correct? And construction of that project required closure of US 101 while it was being built; is that correct?

A I am not specifically familiar with that.

Q Where on 101 is it located?

A In Aberdeen.

Q Does the culvert run entirely under US 101?

A I am not specifically familiar with that.

Q The contract for that project was $728,34- -- excuse me, $728,349.25, wasn't it?

A Again, I'm not familiar with those -- with that particular number.

Q This is done under the program you manage; is that correct?

[Original Page 69]

A Yes.

Q Did that contract that you administered seem to be about $730,000?

MR. SHAFTEL: Objection, lack of foundation.

THE COURT: I think he has answered the question, Counsel. He is not particularly familiar with it.

By Mr. Johnsen:

Q Would you look at Exhibit AT-334? This appears to be the construction report for the Mosquito Creek project that we have just been discussing?

A It appears to be.

Q Do you recall that the contract amount when it was actually awarded was substantially lower than the engineer's estimate in this project as well?

MR. SHAFTEL: Objection. Lack of foundation. This witness has not testified that he had any previous knowledge on that issue.

THE COURT: Overruled.

THE WITNESS: I know from talking with my staff that we had a number of projects that came in this season under budget -- or under estimates.

By Mr. Johnsen:

Q Under estimates. In fact, every one of them did?

A Yes.

Q The estimates were uniformly high?

[Original Page 72]

what goes into these numbers.

THE COURT: All right. Which ones are you asking to admit for that limited purpose?

MR. JOHNSEN: 332 through 336.

THE COURT: Is 337 one of these as well?

MR. JOHNSEN: It is.

THE COURT: So through 337?

MR. HOLLOWED: Yes.

THE COURT: For that limited purpose, no objection?

MR. SHAFTEL: Just for the limited purpose of showing the difference between the bid amounts.

THE COURT: I understand. 332 through 337 will be admitted. By Mr. Johnsen:

Q Mr. Wagner, another of the projects was on State Route 122. Would you look at Exhibit 337, please?

Does the title -- the contract title there refer to the project that you were referencing when you said that a Mayfield Lake project was done this year?

A Yes.

Q That is the same project?

A That's correct.

Q Now, for the four projects that were done under the Nickel Program, the two on Tibbetts Creek and the two on Burly Creek, those would fall into the category of we really don't know how

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much the culvert aspect of those cost because it was to know as part of the larger project; is that correct?

A That's my understanding, yes.

Q So we have in these Exhibits 332 through 337 both the contract amounts for construction for the projects for this season, where data's available on the cost, and the engineer's estimates for each of those projects; is that correct?

A That appears to be so.

Q I will move on to a different subject. Back to your declaration. On Page 12, as it happened, when you were doing the declaration you said that you received

a call on a project – I think it's actually two projects, that you had planned for this year's construction season that caused a delay, and they were located in Poulsbo. Do you recall that?

A I do.

Q Now, the objection that the City of Poulsbo had was that they didn't want the department to be closing a state highway through Poulsbo for construction and requiring traffic to go on other city streets to get around the construction; isn't that correct?

A Yes, that is my understanding.

Q And they were going to actually deny you the use of those other streets for this construction season; isn't that also correct?

A Yes.

[Original Page 92]

number, because for the purposes of the case we have taken out some barriers that were for resident-only fish.

Q But the proportion -- the two-thirds proportion that fixes problems is about the same, if I didn't butcher that question so badly that you couldn't understand it?

Let me try again. About two-thirds of the barrier culverts are located in the case area and about two-thirds of the fixes are in the case area; is that correct?

A Roughly, yes.

Q Now, in terms of the future, based on your testimony today, is it true that you can't -- you're not able to tell the Court by what year the Department of

Transportation plans or intends to have corrected the 800 fish passage barriers that exist in the case area?

A That's correct.

Q And you're not even able to tell the Court the rate at which the Department of Transportation plans or intends to correct those barriers. Is that also correct?

A Well, we put together our ten-year plan to show what our intent is and what we would be prepared to do if funding were available. But ultimately our rate is determined by funding from the legislature, which we don't control.

Q And the ten-year plan is also based on funding that you know or anticipate at this point; isn't that correct?

A Well, our ten-year plan is identifying corrections that we

[Original Page 93]

think could be accomplished in that timeframe, ones that we think would be appropriate to be working on and are staged to be ready for delivery on the schedule that we're laying out there.

Q And those ten-year plans appear in the annual progress reports each year, don't they?

A They appear -- in 2006, we were still using a six-year plan. And subsequent to that, we expanded the program to a ten-year plan.

Q But the current ones have a ten-year plan in them?

A Yes.

Q Beyond that, you don't know what the rate would be; is that correct?

A Depends on funding.

Q And even within the ten years, it still depends on funding, doesn't it?

A Yes.

MR. JOHNSEN: Thank you, Mr. Wagner.

THE COURT: Redirect for Mr. Wagner?

REDIRECT EXAMINATION

By Mr. Shaftel:

Q Mr. Wagner, we've done quite a bit of talking about the ten-year plan, but I don't believe you've actually shown the Court what we're talking about.

Can you look at the monitor there and tell me what is this on the monitor?

[Original Page 106]

A We do.

Q What is that system?

A We contract with the Department of Fish and Wildlife to do annual fishway inspections, and those are reported on as part of our annual report.

Q And why does it have that system in place?

A It's important to keep after those, because they do require maintenance, they do require ongoing monitoring.

Q In fact, of the 49 mentioned, aren't a number of those, or a great deal of those, the fishways that you're monitoring over time?

A Yes.

Q I would like to turn your attention to Page 5 of your declaration, Paragraph 9. I believe you were asked a question about what you meant in this paragraph here relating to the Federal Highway Administration HEC 10 document and whether or not the DOT in fact looks to the Federal Highway Administration to provide fish passage standards or whether or not it looks to state guidelines.

Do you remember that question?

A I do.

Q What was your intent by making a mention of HEC 10 in this paragraph?

A In terms of engineering guidance, Washington State DOT and other DOTs do look to the federal highways for basic guidance for

[Original Page 107]

engineering design. And my point in bringing this up was that this is really, to date, the only manual or direction that's been provided for how to design culverts from the Federal Highway Administration.

The focus has been on design for hydraulic capacity not just to kind of carry water. And in my declaration, I mention that just in the last couple of years, the Federal Highway Administration has issued a synthesis document that's sort of an analysis of the state of the art for fish passage but has yet to put out a manual or a direction on how to incorporate that into hydraulic design.

Q And so did the Department of Transportation historically rely on the HEC 10 document?

A Yes.

Q And that document didn't mention anything on whether or not those culverts that were being installed by the Department of Transportation, consistent with those guidelines, in fact metfish passage standards; is that correct?

MR. JOHNSEN: Object to the form of the question. It's leading.

MR. SHAFTEL: It's redirect.

THE COURT: The objection is sustained.

By Mr. Shaftel:

Q Did the department -- I'm sorry. Did the Federal Highway Administration ever inform the Department of Transportation that

[Original Page 108]

HEC 10 standards did not, in some cases, allow for fish passage, to your knowledge?

A Not to my knowledge.

Q You were asked a number of questions about projects that are 16 feet or less in width size and projects that have yet to be performed that are still on the list.

Do you remember that set of questions?

A Yes.

Q There was a representation made to you that assumed that 80 percent of the culverts in fact could be addressed with a 16-foot width or less number.

Do you remember that question?

A I remember that question.

Q My question to follow up on that is whether or not the width of a culvert is the only driver of costs.

A It's definitely not the only driver of costs. There are similarly significant cost factors related to the depth of fill that's over the culvert, to the length of the culvert itself, to the traffic on the roadway, real estate, right-of-way issues, access issues, all can be significant cost factors.

Q Can risk be a cost factor? Do you know what I mean by "risk"?

A Yes.

Q What do you understand me to mean?

A The chance of something in the project not going as planned,

[Original Page 124]

I think the earlier question was about the general concept of fish passage corrections being added to safety and mobility projects as a means of efficiently correcting barriers.

Q So in your mind, it is added if it is required by state law but not something the department would otherwise do; is that correct?

A Added to the scope of the project.

MR. JOHNSEN: Thank you.

THE COURT: Do you feel a little bit Matt Hasselbeck up there?

Mr. Wagner, you may step down.

MR. MONSON: Your Honor, Peter Monson. I think I have just a couple questions.

THE COURT: Oh, great. All right. Are you ready now?

MR. MONSON: I will be brief. Yes.

RECROSS-EXAMINATION

By Mr. Monson:

Q Good afternoon, Mr. Wagner. I'm Peter Monson. I represent the United States in this case.

There was a couple of questions that you were asked on redirect regarding the HEC 10 standards, or a guidance document. Do you recall those --

A I do.

Q -- that your counsel asked you?

The HEC 10 manual is a hydraulic manual, is it not?

[Original Page 125]

A Yes. "Hydraulic engineering circular" is the acronym.

Q Thank you. Does it have any statements in there regarding the design criteria for fish passage?

A Not to my knowledge.

Q You indicated both on redirect and in your written testimony that "At no time has FHWA notified WSDOT that the federal design standards failed to provide fish passage for the culverts design pursuant to the standards might violate treaty fishing rights." Do you recall writing that statement?

A I do.

Q Has the FHWA ever notified WSDOT that the federal design standards were sufficient to meet the fish passage?

A Not to my knowledge.

Q Is there anything in the HEC 10 circular that precludes the State from modifying the design standards to accommodate local conditions, such as fish passage?

A Not that I'm aware of.

MR. MONSON: No further questions. Thank you.

THE WITNESS: Thank you.

THE COURT: Mr. Shaftel, anything else from the State based on the questions from the government?

MR. SHAFTEL: No questions.

THE COURT: Mr. Wagner, you may step down. Thank you.

Counsel, let's take our break.

(At this time, a short break was taken.)

[Original Page 159]

removing the culverts. Is it your opinion that you have to know the actual number of fish increase to know what you're doing has a benefit to fish?

A No, I don't think you do.

Q Has parks completed their inventory of culverts?

A No, I don't believe they have.

Q Did they used to have a contract with WDFW and it terminated?

A Yes.

Q Do you know anything about the costs of different culvert designs, say between hydraulic and stream simulation?

A Only in a general sense.

Q In terms of a culvert project, I have been told often the highest cost involved manpower, the diversion of the roads, and other types of costs would essentially be constant between two types of culvert fixes.

Is that your understanding?

A If you are getting to the size of the culvert, it is not the largest influence in the cost of the project, that can be true, yes.

Q In fact, you testified earlier if you're doing an open cut, there really isn't much difference between stream simulation and the cost of a hydraulic culvert; is that correct?

A I don't believe so, no.

Q Because the idea is if you're digging up the road anyway and you're diverting the traffic anyway, that this is just a

[Original Page 160]

difference in size of the culvert; is that correct?

A There's a small monetary difference, but I think relative to the overall project cost, it would be small.

Q I believe you heard Mr. Wagner testify earlier about WDFW monitoring fish passage barriers; is that correct?

A That's correct.

Q Isn't it just 1-4 projects that are monitored currently?

A That is correct. We only do a compliance inspection on those projects that were constructed using other funding sources. We do not do any followup monitoring other than those that fall within the category of a fishway retrofit. Those, we will inspect annually.

Q Because fishways have lots of problems, right?

A That's correct.

Q So you can't just walk away from a fishway?

A No, you can't.

Q But for the rest of the culverts, nobody's going out to look at them to see if they're currently complying with fish passage?

A No. Nobody from WDFW.

Q Are you familiar with the scoping work for the Highway 3 crossing at the mouth of Chico Creek in Kitsap?

A A little bit.

Q Are you aware that this is a pretty expensive project, around the range of $31 million?

A Yes.

[Original Page 161]

Q Is it a good project?

A Yes, it is.

Q And why is it a good project?

A There's a significant amount of habitat upstream, and Chico Creek also is a significant Chum Salmon producer in that area.

Q So from your perspective, it is high cost but well worth it?

A It's a good project, yes.

Q Are you responsible for the collection of data regarding DOT culverts in the case area?

A Ultimately, yes.

Q Basically it's done by field crews?

A Yes.

Q And one of the elements that the field crews measure is lineal salmon habitat upstream?

A Lineal gain upstream.

Q And they measure spawning area?

A Yes.

Q And rearing area?

A Yes.

Q And they put this all into a database called the FPDSI; is that correct?

A That's correct.

Q And you testified that WDFW calculated PI values for some of the culvert sites in the case area?

A Yes.

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asked if it's reasonable to rely on certain parts of the document. I'd like to know what he thinks about the -- if he thinks the document is acceptable.

Can you go ahead and put up 156?

THE COURT: You may proceed, Ms. Rasmussen.

RECROSS-EXAMINATION

By Ms. Rasmussen:

Q Mr. Barber, Ms. Woods asked you about numerous portions, including the cost estimate that was done in 1997 and the number of culverts and a couple of other items that she asked you if it was reasonable to rely on, and you said no.

Is that the extent of the parts of the document which are not reasonable to rely on?

A I think there are other components of it that could be questionable.

Q Is it questionable, the statement in the first paragraph, that "Fish need habitat, but if they cannot reach spawning and rearing areas, then the full potential of the habitat is not achieved and depressed, and even healthy fish stocks decline to levels that cannot support utilization objectives and even levels of extinction"?

A I think that statement's correct.

Q And No. 2, that state law requires fish passage, is that no longer correct?

A No, that is still correct.

[Original Page 10]

Q And you didn't state any opinion about the miles of road crossings that were estimated, did you?

A No, I didn't.

Q Is it still true there is a need to accelerate fish passage corrections?

A I believe so.

MS. RASMUSSEN: No further questions. Thank you.

THE COURT: I believe you may step down. Thank you.

THE WITNESS: Thank you.

THE COURT: Do we have a new witness?

MS. RASMUSSEN: Your Honor, I believe we have to deal with the rest of the objection back-and-forth of Ms. Woods and I on AT-236.

THE COURT: Let's deal with AT-236. That's the Fish Passage Inventory and Corrections Status Summary.

MS. WOODS: Your Honor, we maintain the objection to that document. As indicated in Mr. Barber's answer, that document was prepared for litigation. It was not prepared by an agency employee within the scope of his normal duties. It was prepared for litigation.

THE COURT: Ms. Rasmussen?

MS. RASMUSSEN: Yes, your Honor. This is essentially the quintessential admission. They created something and now they no longer like what

they created, and so they want to take it back. But under the -- it's not hearsay under 802 (d)(2)(b)

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want to make that stream simulate the outside of the stream when you're doing the culvert. But in terms of their size, would it be fair to say that a stream simulation culvert would, in the main, be wider than a no-slope culvert?

A Are you talking about the span or the width of the bed?

Q The width of the culvert. The culvert would, as I understand the formula, would create a culvert slightly wider than the bankful width with respect to a stream simulation. Is that true?

A Yes, although that may not be true in terms of the culvert span. But we will make it simple, and I'll say yes.

Q Good. I appreciate your help on that.

My question goes one more, though. If I'm going to install both of those and I'm going to have to dig a hole to put it in, and I put a coffer dam up so the water doesn't come through when I'm working on it, and I've got to buy flaggers, and I've got to buy -- whatever I have to buy to make this happen, there really isn't much difference in the cost between a stream simulation and a no-slope when you decide to install one or the other?

A In a public works project like you'd find on a public road, the cost of the culvert is relatively small compared to the overall project costs. Now, on a forest road, that is not the case any longer.

Q In terms of Department of Transportation, which have public work highway kinds of projects?

A That's exactly right. The guardrail probably costs more than

[Original Page 116]

the culvert does.

Q Thank you.

A I shouldn't have said that.

Q I think I understand. It's relatively small.

A Yeah. There are all these other elements into these things which are very costly, and traffic control being one of them.

Q You developed stream simulation when it wasn't there before?

A Right.

Q Is it fair to say that culvert design methodology, science, is evolving?

A Yeah.

Q And you would expect, then, that some day, sooner or later, somebody might have an improvement to stream simulation?

A They might.

Q It may be you?

A It may be me.

Q I understand you're doing some studies right now?

A That's right.

Q So that applying some sort of an adaptive management or continuing to look at the process would make sense from a scientific point of view?

A Well, if my experience with the forest and fish adaptive management program is any example, I would say no.

Q Let's leave forest and fish out for a moment and just look at the concept of continuing to look at the science that exists

[Original Page 122]

methods.

Q Right. I put it as more of illustrative. I didn't --

A Yeah. What we're showing is this continuum, just on the basis of width, between the smallest, least expensive, but having the greatest ecological effects, to one which has the greatest benefit, showing that continuum.

MR. STAY: And again, a second time, thank you very much. I have nothing further, your Honor. Mr. Monson has a few questions.

MR. MONSON: Thank you, your Honor.

RECROSS-EXAMINATION

By Mr. Monson:

Q Mr. Barnard, I'm Peter Monson. You last saw me probably on a little black box on a speak phone at your deposition. It's a pleasure to meet you in person.

I just have a very few questions. I can't help but comment that your enthusiasm for the stream simulation method is very infectious.

A Well, one of the federal agencies, the Forest Service, has written an absolutely stunning guidance manual on stream simulation.

Q Well, thank you. You just answered my next question. I appreciate that.

A I was one of the major reviewers for that guidance manual.

[Original Page 123]

Q Excellent.

And the Forest Service has a slightly different technical approach, does it not?

A Oh, that. Well, we're headed to the same place. We're headed to simulating natural stream conditions inside the culvert. We're both going to the same place, but they get there with a level of rigor which is way beyond what we require.

Q That's good to know. Thank you.

Now, the National Marine Fisheries Service has also indicated a preference for the stream simulation methodology, right?

A Yes.

Q And they have an approach that's also ended towards the same goal. They calculate the --

A It's headed towards the same goal, although they use – I want to remember this correctly. They use a simple factor to relate the bankful channel width to the culvert bed width. I believe it's 1.3.

Q From a fish's perspective, it probably looks about the same?

A Well, actually, one of the problems with it -- do you want to know what the problems with it are? Do you want me to go into this?

Q I don't really want to get into too much detail. I wasn't really looking. I was just wanting to make a point that they have developed similar methodology.

A They have a criteria as well.

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fish passage and culverts called -- I think it's called HEC 26. I just read a final draft of it a couple of weeks ago.

Q Does the Federal Highway Administration also indicate a preference for stream simulation culverts?

A Well, actually, the draft I read of HEC 26, they recommend a culvert design method based on sediment stability.

It was very disappointing. I read the initial draft of this. They are adamant. It's sort of an engineering-based design. It is kind of like -- it's basically kind of a velocity sort of design based on sediment stability.

Q From a fish passage perspective, you still continue to believe that stream simulation is the best?

A Oh, yeah.

MR. MONSON: I have no further questions. Thank you.

THE COURT: Any redirect, Ms. Woods?

MS. WOODS: No redirect, your Honor.

THE COURT: Mr. Barnard, before you step down. I appreciate your enthusiasm for all this as well.

Thank you. I have a question that may not make a lot of sense. Maybe it's my lack of understanding here.

THE WITNESS: It's a complicated business.

THE COURT: I assume that most of the streams that we're talking about that have these barriers drain into either Puget Sound or the Pacific Ocean, correct?

THE WITNESS: You're talking about the case area?

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thing is to have a comprehensive look of integrating all those Hs and the processes connected to them into one particular way of looking at fingerprinting the watersheds. In other words, how do those comprehensive uses fit together to give you the best bang for the buck for salmon recovery.

Integrating into the watersheds would allow you to fingerprint which part of the H needs to be done at which particular point in time, and how they all fit together in the watersheds will become much clearer than they are right now. In some cases, you have people competing for funds because they want to address one H over the other H, and there just isn't that much money to go around to do that.

In my particular view, and the co-managers in the state of Washington have been trying to do this, we just haven't had the money and the personnel to get it done, given all our other responsibilities, is to begin to form an integrated look to what needs to be done in each one of the watersheds so we have a

comprehensive plan of moving forward. That would be the starting point, and then you could take your bushel of money and begin to apply it to those particular priority needs.

That would be, if I were ruler of the world for ten minutes, my view of it.

THE COURT: In your opinion, that is not occurring right now?

THE WITNESS: In my opinion, that is not occurring to

[Original Page 86]

the degree that it needs to occur. That's correct. It has not been done on a systematic basis.

THE COURT: And when we talk about that integrated look, I'm sure you are including the tribes as well?

THE WITNESS: Absolutely. Oh, absolutely. Again, we've been trying to do this. We just haven't been able to get to it.

THE COURT: Ms. Woods?

MS. WOODS: I have no further questions at this time, your Honor.

THE COURT: Cross-examination, Mr. Stay?

MR. STAY: Thank you very much, your Honor.

CROSS-EXAMINATION

By Mr. Stay:

Q Nice to see you, Dr. Koenings.

A It's a pleasure to be here. We've done this before.

Q Haven't we, though? You're not an engineer, are you, Dr. Koenings?

A I am not.

Q Nor are you a hydrologist?

A I am not.

Q So you're not an expert in the design or operation of culverts?

A I am not.

Q As I understand it, there is -- we have limited factor assessments now in all of the watersheds?

[Original Page 104]

And the State may call their next witness.

MS. WOODS: Your Honor, the State will call Brian Benson.

THE COURT: Mr. Benson, I'll have you raise your right hand and be sworn.

Whereupon,

BRIAN BENSON

Called as a witness, having been first duly sworn, was examined and testified as follows:

THE CLERK: Please state your full name and spell your last name for the record.

THE WITNESS: Brian Benson, B-E-N-S-O-N.

THE COURT: Mr. Benson, there's water on your left if you need it.

You may inquire, Ms. Woods.

DIRECT EXAMINATION

By Ms. Woods:

Q Good afternoon, Mr. Benson.

A Good afternoon.

Q Mr. Benson, where do you work?

A I work for the Washington Department of Fish and Wildlife.

Q How long have you worked for the Washington Department of Fish and Wildlife?

[Original Page 105]

A Almost 29 years.

Q What are your current job responsibilities?

A Currently I'm an information technology specialist in the science division, which is part of the habitat program. My job responsibilities, I manage two fairly large natural resource databases. It involves design, construction, maintenance, updating, modifications. I'm responsible for creating and maintaining the GIS products that come out of those databases.

Q How long have you been doing that type of work?

A Probably started in the early 90s.

Q Would you please describe your educational background?

A I have a Bachelor of Science in marine resources from Huxley College of Environmental Studies at Western Washington University.

Q Do you have experience as a fish biologist?

A I have held that position, yes.

Q With the Washington Department of Fish and Wildlife?

A That's correct.

Q Is that before you began the database work that you've been doing now for a while?

A Yes, and kind of at the same time as well.

Q Mr. Benson, were you in the courtroom during the testimony of Tyson Waldo?

A Yes, I was.

Q Do you recall him using the acronym FPDSI?

[Original Page 106]

A Yes, I do.

Q What does FPDSI stand for?

A Fish Passage and Diversion Screening Inventory.

Q Is that a database?

A That is a database.

Q Who developed the Fish Passage and Diversion Screening Inventory Database?

A I did.

Q Why did you choose the title "Fish Passage and Diversion Screening Inventory"?

A Well, for one, it's reflective of the contents of the database. Also, it is hard to pronounce. Most database developers like to come up with names that have catchy acronyms, and I don't particularly care for that.

Q Is it okay if I use it -- if I call it the FPDSI?

A Yes.

Q Would you please describe the history of the FPDSI?

A Well, the predecessors to the FPDSI probably originated in the late 1980s and early 1990s. I started with the SHEAR program about 1996, and there were several independent databases being used to keep track of the various fish passage inventories and fishway inspection projects. There was just an ad hoc kind of table, essentially, that contained barrier information.

After I joined the division, we started the Thurston County inventory, which had its own database, and then the Jefferson

[Original Page 107]

County inventory, again, had a separate database. So in about '97, '98 when we started working on the manual, we decided to create a database to support the manual, and as part of that process, we would incorporate all the other independent databases into it. That database became known as SHEAR base, and it's undergone several iterations over the years and finally ended up being the FPDSI.

Q When you say "the manual," what are you talking about?

A That's the Fish Passage Barrier Assessment Manual.

Q Are you the person who currently maintains the FPDSI?

A Yes, I am.

Q What kinds of data does the FPDSI contain?

A It contains information on fish passage structures. It contains some information on surface water diversions. Relative to the fish passage information, it's got locational data. It's got specific descriptors of the various types of fish passage structures, whether they be culverts, dams, things like that, the habitat information, and the priority index information.

Q Does the data change over time?

A It changes on virtually a daily basis.

Q And why is that?

A Well, it's an active database. We have a lot of work going on with the DOT inventory crews. They come in and update and add data weekly. I add data on a fairly regular basis from inventory information coming in from non WDFW sources.

[Original Page 108]

Q About how many records for fish passage structures does the FPDSI have today?

A It has over 36,000.

Q About how many of those are human-made fish passage barriers?

A Around 11,500.

Q Of those 11,500, about what proportion are state owned?

A I guess it's just under 25 percent.

Q Does the FPDSI have records for every fish passage barrier in the state of Washington?

A It does not.

Q Why not?

A Well, several reasons. There are a number of large data sets that we don't have. We don't have DNR's data set incorporated. We don't have the Forest Service data set. We don't have the large commercial forest landowners information. There's just a lot of private and local governmental culverts out there that have not been assessed and inventoried.

Q Are the inventories for Washington State Department of Transportation culverts complete?

A I believe they are.

Q Are the inventories for Washington Department of Fish and Wildlife culverts complete in the case area?

A I believe so.

Q Is the inventory for state parks culverts complete?

A Not to my knowledge.

[Original page 109]

Q Has any complete inventory of non state culverts been done, to your knowledge?

A No.

[Original Page 115]

remaining pages in the exhibit and tell me if the remaining pages are all similar to Page 3 displayed on the screen.

A Yes, they are.

Q Do they display a similar type of information?

A Yes, they do.

Q Did you prepare any maps that illustrate non state-owned passage barriers upstream and downstream of the culverts that Tyson Waldo used for his analysis?

A Yes, I did.

MS. WOODS: Your Honor, I will be attempting to lay the foundation for 14 maps. I hope that we can streamline this a little bit.

THE COURT: Can you tell me what exhibit number they start with, Counsel?

MS. WOODS: 119.

By Ms. Woods:

Q Mr. Benson, are those maps in the same binder that you've already got, I hope?

A Yes.

Q I have up on the screen Exhibit W-119. Mr. Benson, did you prepare this exhibit?

A Yes, I did.

Q What is it?

A This is a map of Chico Creek, displaying the upstream and downstream barriers associated with a barrier taken from the list

[Original Page 123]

A Yes.

Q But your point isn't that the State doesn't have to fix theirs; it's just that there's a lot of other work that has to be done, right?

A That's correct.

Q And in order to achieve the benefit -- say the counties were to come in and really go out and fix that 1,370 barrier culverts, it wouldn't realize its full benefit, right, unless the State fixed their 315?

A That's correct.

Q And I believe in your Exhibit 88-C, you say there's 42 barriers with no other barrier in the watershed. And when I look at 133 and sort of go through, there's a couple of pages past this. I went through the columns of the grand total and looked for zeros, and I found about 77 of them.

Would that be my mistake or a change in the data set?

A I believe there may have been some qualifiers on the data that were used in the other table. I think there was a minimum of 200 lineal meters of habitat required upstream that would have to be included on that. This table here, that filter is not in place, so some of these that you see here may not have that 200 meters of habitat associated with them.

Q While we're on this page, I want you to take a look at site 102 L 062, where it says there's 140 other culverts in the watershed.

[Original Page 124]

That's Little Bear Creek, isn't it, one of the examples that Mr. Tomisser used in opening statements?

A I believe that's correct.

Q It is kind of an outlier, isn't it?

A It's a very high number.

Q In fact, it's the only culvert of the 315 that has 81 more sites associated than any other, is that correct? In the ballpark. I'll say I counted.

A Can you repeat that, please?

Q Little Bear Creek, the example used by Mr. Tomisser in his opening to illustrate his problem, is such an outlier, in fact, doesn't it have about 80 more sites associated than any other culvert in the examples? If you want to verify, you can scroll through -- go ahead and circle that first page where the 140 is. I'll attest to you that I verified that that was in fact the site ID for Little Bear Creek.

I don't find anything on the grand total that's anywhere near that particular example that Mr. Tomisser chose to use in his opening. Do you?

A No, you don't.

Q And in fact, you use this example because Counsel asked you to, right?

A That's correct.

Q Does Little Bear Creek, to your knowledge, have a high PI or a low PI?

[Original Page 137]

I'm going admit AT-323 and AT-324.

By Ms. Rasmussen:

Q I guess I'll have to use this one.

You created this spreadsheet; is that correct?

A Yes, I did.

Q And if you wanted to know -- I attested to you that the tribes have proposed in the pretrial order a

resolution whereby they're asking DOT to fix 90 percent of the habitat.

Would there be a way to find out, based on this analysis, what 90 percent of the habitat -- how many culverts that would mean?

A Which habitat metric are you referring to?

Q Well, if I understand correctly, this worksheet has "habitat gain" on it. It has "lineal gain" in Column M.

So you have "lineal gain" in column M, and that lineal gain is associated with fixing certain culverts. And have you another column that's the cumulative percentage of habitat? Is that the one in Column 0?

A "Cumulative percentage of lineal gain."

Q "Cumulative percentage of lineal gain." Well, how would you find out 90 percent? Since it is your spreadsheet, I won't embarrass myself by doing it for you.

A Well, you would go down the column until you reach the 90 percent value. That would correspond with a line that would give you the number of culverts associated with that value.

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Q I believe we've found the line. Can you scroll over and tell me how many culverts that would be?

Sorry, your Honor, it's a little different than the worksheet.

Let's go back to 323. Is there a way to find out what line culvert this is? When we printed it out, it did a numerical value for which culvert it was.

A I think you're corresponding to a value of 577 there.

Q Okay. So the sort number is that it would take, according to this worksheet, 577 of the 807 culverts with over 200 meters of habitat to get 90 percent of the habitat gain; is that correct?

A Based on the information that's in here. Again, you're mixing estimated with real data here, so you can't say for sure that that is exactly what you're going to end up with.

Q And when you say "estimated," you're referring to the SPI, not the EDT analysis which you referred to before as the non field verified?

A EDT is also an estimate.

Q Okay. And you use EDT frequently, correct?

A We don't use it that often anymore.

Q Does it amount to a large percent of the data or just a small percentage?

A I would say a smaller percent.

Q So your caveat here is that the SPI is based on this GIS exercise, so that it's not absolutely 577 exactly, which would

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yield 90 percent habitat gain; is that correct?

A That's correct.

Q And in order to know that for sure, you'd probably have to do these habitat assessments that the tribes are interested in having the department complete; is that correct?

A That's correct.

Q All right. But this would give you at least some sort of idea that the remedy that the tribes are seeking isn't all 807 of the culverts, should the department complete habitat surveys.

A That's correct.

Q And that would impact the total number that would need to be fixed at an accelerated schedule; is that correct?

A I believe so.

Q So unfortunately for me, I have another spreadsheet I'd like to ask you about, 168.

Do you know what the anadromous all PI 92 worksheet might be?

A Yes, I do.

Q Do you recognize this?

A I do.

Q And did you do this?

A Yes, I did.

Q And what does it represent?

A It's essentially the same as the previous spreadsheet; however – well, it's not essentially the same. It's the same site, same order. It doesn't have the calculated fields, the

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Q And you don't know why it has such a high PI?

A Well, there are many factors that go into the PI. It could be the amount of habitat, the potential habitat

gain. It could be the number of species that stand to benefit.

Q If I wanted to know the potential lineal gain from Little Bear Creek, what would I do?

A Potential lineal gain?

Q Yeah.

A Well, I would just follow the spreadsheet over to right there where it says "potential lineal gain."

Q And you don't recall if that's somewhere near 18 miles of habitat?

A I'd have to do the math. I don't report my stuff in miles typically.

Q But the examples -- suffice it to say that the examples of the maps you used, and I don't mean to beat a dead horse, were not randomly selected; they were selected because they had a high number of barriers, right? It wasn't a statistically valid sampling technique?

A It was -- yeah. The sites were not randomly selected.

Q The purpose was to drag out a bunch of examples where a lot of people were shirking; isn't that correct?

MS. WOODS: Objection as to form, your Honor.

MS. RASMUSSEN: Sorry. I've been reading "Horton Hears a Who."

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CROSS-EXAMINATION

BY MR. SLEDD:

Q Good morning, Mr. Moore. Mr. Tomisser reminded you of when we met, which was June 22nd, I believe, at your deposition?

A Yes.

Q I want to start out by going a little bit through your qualifications in the preparation of your declaration. I will not ask about your biological background.

Before you went to work for OFM in 1986, you did not have any experience working with state transportation budgets, did you?

A No.

Q And you worked as a budget analyst with transportation budgets for a few years, but that ended in 1991, I believe you said?

A Correct. Four years.

Q About 20 years ago?

A Correct.

Q When you were a budget analyst for Senate Ways and Means in 1983 and 1984, you did not work with the transportation budget?

A No.

Q And when you were with the House Appropriations Committee from 1991 to 2000, you did not work with the transportation

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budget and about 3 percent on the transportation capital?

A I think you're talking about the amount that the budget went down versus the amount that the revenue went down.

Q Oh, okay. But the general conclusion was that the general fund budget has been worse off than the state transportation budget?

A In terms of percentages, yes.

Q In terms of percentages of revenue and in terms of percentages of the expenditures that had to be cut as well?

A Right.

Q They go hand-in-hand?

A Correct.

Q I'd like to talk a little bit more with you about the general fund budget as compared to the transportation budget. If you're talking about funding for the Department of Transportation highway construction spending, it's the transportation budget that you're talking about, right, not the general fund budget?

A Correct.

Q The state general fund budget actually isn't that relevant to the DOT highway construction budget?

A No.

Q Because they're two separate budgets, two separate appropriation bills, and they have separate revenue sources?

A Correct.

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Q The general fund is basically you've got sales taxes, B&O, property tax. And on the transportation side, you've got license fees, fuel tax, correct?

A Correct.

Q So really, the only way the general fund budget would be relevant to highway construction program is if somebody wanted to take money from the general fund budget and use it to augment transportation spending, correct?

A For transportation-related uses, yes.

Q And are you aware of that ever having been done, where general fund money was taken and put into highway construction spending in the state of Washington?

A I'm not aware on the highway construction side. I think it happened for the ferry system at one point.

Q Once or twice in the 1990s?

A Yeah. In the mid 90s, yeah.

Q What I call the natural resource agencies and the landowning natural resource agencies, the DFW, Department of Fish and Wildlife, state parks, and the Department of Natural Resources, are they funded through the transportation budget?

A I think some of them receive a small amount of transportation funding if they have -- I think there's some road programs where Fish and Wildlife might receive some money. I'm not certain of others, but I think there is some limited transportation-related money to deal with roads

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MR. TOMISSER: Thank you. Nothing further, Your Honor.

THE COURT: Mr. Moore, thank you very much. You may step down, sir.

THE WITNESS: Thank you.

THE COURT: Nobody asked him what he thought of Tim Eynman while he was on the stand.

You may call your next witness.

MR. TOMISSER: Before I do that, Your Honor, if I might approach and hand the clerk the amended G before we lose track.

THE COURT: Thank you.

MR. TOMISSER: The state calls Mr. Jeff Carpenter.

THE COURT: Good morning, Mr. Carpenter. Raise your right hand to be sworn:

JEFF CARPENTER, HAVING BEEN FIRST DULY SWORN, TESTIFIED AS FOLLOWS:

THE CLERK: Could you please state your name for the record and spell your last name for our court reporter.

THE WITNESS: Jeff Carpenter, C-a-r-p-e-n-t-e-r.

THE COURT: You may inquire.

DIRECT EXAMINATION

BY MR. TOMISSER:

Q Good morning, Mr. Carpenter. Thanks for coming back. To get started here, could you describe for the court briefly

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both stream and anything carrying water across our highway.

And some of the measurement criteria is keeping it free of debris, routine inspection and cleaning, removal of beaver dams, should they be an issue for us. So on this, those are the criteria. And to get a C, we need 5 to 10 percent of our culverts, effectively, having issues. Anything more than that, we would be less than C; anything better, we'd be better than that particular grade. So each one of these elements has a similar measurement set.

Q So this broad category 282 for culvert, is that more culverts than just fish-bearing culverts?

A Yes. It's all culverts across the highway.

Q And so then when we look over the headings across the top of the sheet, do those refer to the various regional areas within the Department of Transportation around the state?

A Yes. Those are the regions that we designate in terms of our core response and how we manage our agency.

Q And so if we look at the northwest region and then read the grades, go down, what does that tell us? How do we read those grades in comparison to the target set by the legislature?

A Okay. So the northwest received an F-plus on culverts. And I had to ask because I didn't know what

the plus was either. The plus -- effectively, anything over 20 percent blockage receives a grade of F. So if it's 21 percent or 81

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passable would either be an improvement or a preservation project; is that correct?

A Correct.

Q So those would come out of the bottom half, the capital half of this budget?

A Uh-huh. Yes.

Q All right. Well, back to these budget numbers. The $20.3 million that the legislature apparently has appropriated for the culverts for this biennium, that's the highest amount that's ever been appropriated for that purpose, isn't it?

A I believe so.

Q And compared to the overall budget of the department, that -- well, let's see. How would we do that math? One percent of a billion dollars is ten million dollars; is that correct?

A Yes.

Q So maybe the simplest way to --

THE COURT: This is why I became a lawyer.

MR. JOHNSEN: This is exactly why I became a lawyer. I was planning on dealing with billions all the time.

Q (By Mr. Johnsen) Basically what we're going to do here is figure out what percentage of the overall budget the culvert appropriation consists of. You

would take 20.3 million, or figure 20.3, and divide it by whatever the total budget is, either 5.271 -- or excuse me, 5,271 or 5,800; is that correct?

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Q But it's not -- well, let me ask this question. Have you compared the characteristics of the projects on that list, the scoping list, with the list of 800 projects that remain to be done in the case area for the washed out fish passage culverts?

A No.

Q So you don't know whether the scoping list is in any way representative of the number of projects that remain to be done?

A No, not with what certainty.

Q Well, you have no basis for making a comparison because you haven't done a comparison; is that correct?

A All estimating we do is based on risk. And if we were asked by the legislature to give us a price, we would use the scoping list as the best available document to extrapolate from there, acknowledging that there could be variations in the estimates, and this is the best we have at that time.

Q But you've not been asked by the legislature to give an estimate of the -- no, that's okay. Never mind.

The center line miles graph, or whatever that was that was shown, the exhibit that was admitted earlier today, I take it that the center line on Interstate 5 is actually not a line on the road at all; it's just a length of the road from Vancouver to Blaine. Is that correct?

A There's no line in the road, no, sir. It's theoretic.

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THE CLERK: Would you please state your name for the record and spell your last name.

THE WITNESS: My name is Philip Roni. Last name is spelled R-o-n-i.

DIRECT EXAMINATION

BY MR. MONSON:

Q Good afternoon, Dr. Roni. Where are you employed?

A I'm employed at the Northwest Fisheries Science Center of NOAA Fisheries in Seattle, Washington.

Q What's your position there?

A I'm a research scientist and the watershed program manager.

Q What are your duties, first as a research scientist?

A Developing proposals, overseeing research, analyzing data, and publishing results of those studies.

Q What are your duties, generally speaking, as the watershed program manager?

A I lead up a program of about 25 research scientists. We do research on primarily freshwater and stream habitat for salmon. And so my duties there are I directly supervise about four people, and then there's three research teams, one that focuses on restoration effectiveness, one that focuses on ecosystem processes, and one that focuses on landscape ecology and recovery science. I'm also responsible for the budgeting for the entire program.

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Q When did you first begin working for the National Oceanic and Atmospheric Administration, which I'll often call NOAA?

A I began working for them in 1995.

Q And what position have you held at NOAA since you began in 1995?

A In 1995, I was hired as a research scientist to start up a freshwater habitat research team. And so initially – to lead up a research team. And also I served as the representative on the research and monitoring committee for the Northwest Forest Plan.

Then I was the team leader for the Instream Restoration Effectiveness Team, and then we became the watershed program in the year -- well, I became the manager of the watershed program about the year 2000.

Q Have you ever worked for the Washington Department of Fisheries or its successor, Department of Fish and Wildlife?

A Yes. In graduate school in 1990, I was actually – part of my research was funded by the Department of Fisheries, and I did some work for them to fund my research. I am a biologist too. But I was stationed at the University of Washington.

In 19- -- I guess I can look at my CV. I think in '93 or '94, I worked for the Department of Fisheries, which then became the Department of Fish and Wildlife, at the Brennon Shellfish Lab on the Hood Canal.

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your participation in these various groups, as well as your publications, would you consider yourself to be an expert in salmon habitat restoration and salmon recovery?

A Yes. Sorry, it feels a little odd to say that.

MR. MONSON: Your Honor, I move to qualify Dr. Roni as an expert under Rule 702.

THE COURT: Any objection?

MR. FERESTER: No objection, Your Honor.

Q (By Mr. Monson) Dr. Roni, were you present in the courtroom and did you hear Dr. Koenings' testimony regarding the four Hs?

A Yes, I did.

Q And those are habitat, hatchery, harvest and hydropower, right?

A Yes.

Q Do you have an opinion as to which of the four H's is the most important to salmon recovery in Western Washington in the case area?

A Yes. I mean, I think obviously in this case it starts with the habitat. I mean, that's really where a lot of the -- that's where the fish production comes from, and that's where a lot of effort is going to try to protect and restore those habitats, so I think that's the most important one.

Q Is there a difference between protecting habitat and

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restoring the habitat? Could you explain what that is?

A Sure. Well, protection -- first I should step back and say that often when we use the term "restoration," it's used in a very general sense to include things that include mitigation, habitat protection, as well as improvement of habitat.

Specifically protection, we usually -- while we lump that in with restoration activities, it usually involves either buying up habitat to protect it or getting conservation easements to protect it or in taking regulatory action or changing existing laws to further protect habitat.

Q I'm going to show you a page from that 2002 paper.

Do you recognize this diagram?

A Yes, I do.

Q Do you know who prepared it?

A Yes. I did, along with some input from the coauthors of the paper.

Q Dr. Roni, I'm going to focus a little bit on the upper left quadrant.

Do you see that area?

A Yes.

Q Can you explain generally what this flowchart diagram shows?

A So basically this flowchart is a combination of what we know about the effectiveness of different habitat restoration

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techniques and what we know about how they restore watershed processes, and it describes an initial way of

prioritizing restoration projects in the absence of very detailed limiting factors analyses. So it's a basic starting point for how to prioritize actions when you have some basic watershed assessment information.

Q Could you describe what the limiting factors analyses is?

A Sure. I think the little testimony that I've heard in this case, it seems like it's actually being misused from the standpoint of the way we tend to use it, at least the research scientists that I work with would use it.

A true limiting factors analyses is basically an analyses of the types of -- the habitat loss in the watershed, the different types of habitat, the fish production for each life stage of a particular species, to figure out exactly which life stage and which types of habitat are limiting the production of fish.

The classic paper on this is Beechie, et al, 1994, which was done for coho salmon in the Skagit River system. Often people refer to limiting -- we throw that term around, "limiting factor analyses" for things that are really just an assessment or a list of problems in the watershed.

But in my view, a true limiting factors analyses is trying to get at which -- as a detailed analysis trying to get at which life stage and which habitats are limiting that life

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stage for a particular salmon species.

Q Are true limiting factors analyses, in your judgment, available for all watersheds in the case area?

A No. To my knowledge, they've been done in Skagit for coho. I think they've done it for Chinook as well. It's been done on the Stillaguamish for coho. Most of the other watersheds, to my knowledge, have not done a limiting factors analyses.

The documents that are referred to as limiting factors analyses, I know that there was the -- I think it was Smith 2000 or 1999. Carol Smith had put together these limiting factors analyses for the different watersheds throughout the state. Those are really what we would consider just a synthesis of available information and a list of the key problems in the watershed. They're not necessarily identifying which of those habitat types or problems are limiting the production of salmon. So we have those for all the watersheds, but they're not what I would refer to as a limiting factors analyses.

Q Are limiting factors analyses specific to a particular species of salmon?

A Yes. They've been done most commonly for coho because we probably have the best information for that species, but it's species specific. So if you wanted to look at doing restoration actions for multiple species, you need to do one

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for each and then try to weigh those, because obviously the actions you might have meant for one species would differ from another.

Q Would the habitat needs for Chinook salmon be the same as for coho, for example?

A No. There would be a little bit of overlap, but they're quite different. So that's why the limiting factors analyses that have been done for the coho in the Skagit or the Stillaguamish are quite a bit different from those for, I think chinook they've done them for.

Q If you don't have a detailed true limiting factors analysis, as you've described it, you mentioned earlier that that reconnecting habitat is important.

Why is that?

A So what -- well, basically we came up with a system for prioritizing restoration actions based on if you didn't have a true limiting factors analysis, this was sort of an internal approach, this figure that you have up on the screen.

And so one of the first things that we -- that I and my coauthors would recommend that we do is that we focus on protecting high-quality habitat, and then the next thing would be reconnecting isolated habitats. So that would be pretty -- obviously this figure is a bit high.

Q Is there a pretty high probability of success through

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reconnecting habitat?

A Well, I think -- yeah. I mean, from the different restoration actions, it's one of the most successful for a couple of reasons. One is because it relies on existing habitat instead of trying to improve marginal or improve okay habitat.

Also what we see is that the fish colonize these areas very quickly, so it's one of the most successful from getting -- the response time is very quick, where some of the other techniques might take decades before we see response, or they might only last -- some of the other habitat improvement techniques might only last a few decades before we have to repeat.

Q When you say the response times is quick, what time period are you thinking of?

A Well, the studies that we've done and that others have done, I don't know that they've got it down to the day, but it's pretty clear that the fish would colonize the watersheds -- the area fairly quickly.

So there's -- we have one study that we've done on a stream down in Oregon where they removed small barriers, a dam of about 20 feet high, on a relatively small stream. And within a week of removing that dam, there were salmon that had moved up there, both juveniles and some adults. It's more akin to -- I think that one of the problems we have is

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we tend to think that it might take years for fish to colonize an area.

But I would say it's more akin to having a fenced backyard with a couple of dogs in it. And if you remove the fence, the dogs don't wait around a year to decide if they're going to go into the neighborhoods' yard. They go over there pretty quickly. So we really see fish moving into those areas pretty quickly.

Q Thank you. I'd like to have you turn your attention to Dr. Koenings' testimony, both his written testimony

and his testimony in court that you heard earlier during this trial.

I believe Dr. Koenings, and I'm just going to summarize his testimony, explained that the best way to recover salmon was to do -- address all of the Hs, so to speak, concurrently and do a little bit in all the sectors at the same time and work from the bottom up.

Is that a fair characterization of his testimony, as you recall it?

A I think that's what I heard, yes.

Q Do you agree with that approach?

A Not entirely.

Q Why not?

A I think that it's pretty clear that the habitat, the rest -- also implied in his answer is that with habitat restoration, we're going to address all the different factors

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at the same time. Starting with the four Hs, I think we need to start by focusing on habitat because that's where it all started and that's what it really depends on.

The other thing that made me uncomfortable about that was that again, it sounded like he was talking about we should do this sort of bottom up or, I should say, attack all -- try to address all the habitat problems at the same time. And that's largely, I think, what has been the failure of most previous salmon restoration or habitat restoration efforts, is doing a lot

of little things across the landscape and not really trying to address some of the key factors first.

Q Dr. Koenings also testified about the current efforts underway to restore salmon, and I think he mentioned the local -- the bottom-up approach, the local watershed councils and that sort of thing.

Are there -- do you have any disagreement with the notions of the bottom-up approach?

A Well, again, I think that what this has led to is lots of -- and this is partly from my experience on the recovery implementation technical team and partly my experience in working with different practitioners on evaluating restoration projects.

The bottom-up approach or the current approach we have leads to the different groups that are doing restoration actions proposing whatever they can get done, whatever they

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to get some of these areas.

Q Do you know if that approach has been criticized by other groups?

A Well, I think it's been -- I mean, it's been criticized. I mean, this is a topic of discussion in the recovery implementation technical team in Puget Sound and the other recovery implementation technical teams that NOAA has set up in different parts of the Northwest here. It also was – I mean, I think back when the state prepared their "Extinction is Not an Option" report, the independent science review panel reviewed that and basically criticized it very heavily

because it relied on voluntary efforts and that those type of efforts have not been successful.

So I think there's a history of the scientific community criticizing the recovery plans for relying on voluntary efforts.

Q Turning your attention, Dr. Roni, to restoring the connectivity to isolated habitats, does it matter if the upstream habitat that has opened up is a very high quality or a moderate quality? Does that play a role in deciding whether to open up that area?

A Well, I think historically, you know, that was one of the factors that was considered most important. In our more recent research where we've evaluated barrier removals, we see that really the amount of habitat is probably – assuming

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the habitat is okay or even marginal, the amount seems to be more important than the actual quality. And the example I would give there is the Cedar River Watershed where we've been monitoring the Landsburg Diversion Dam. City of Seattle water supply has blocked fish access there for about a hundred years. And about five or six years ago, they put a fish ladder on that, and we've been monitoring the recolonization of the fish in that watershed.

And while it's in a protected area, the whole watershed was probably logged probably 50 years ago, and it's not particularly high quality habitat, it's okay, but we've seen fish colonize it fairly rapidly, both juveniles and adults. So that and a few other studies are really suggesting that if you give them the access

and the habitat is even marginal or okay quality, they'll colonize it fairly quickly.

Again, I would use the dogs in the backyard example, where I think the salmon are -- they move around a lot. And so it's not like -- again, you know, if you remove the fence, your dog's not going to wonder whether the yard next door is suitable. He's going to go over there. And it seems to be the same for both juvenile and adult salmon. They move around a lot at certain times of the year and explore different habitats.

Q Dr. Koenings in his testimony talked about the interrelationship between hatchery fish and wild fish.

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fish to recolonize those areas.

So I think in many of the watersheds where we have mixed production, you know, that's what we're -- I guess I don't see the hatchery fish as a problem. We're already relying on them for some of the recolonization and recovery.

Q Some have argued that if there are other culverts, for example, on a stream that are partial barriers or even full barriers to salmon, that it would be perhaps not the best use of funds to spend money to correct an upstream state-owned culvert, for example.

Do you agree with that?

A I think the -- well, many times these culverts are partial barriers. So my concern would be that if we didn't replace a state-owned culvert because there was a downstream fish passage barrier or a partial

barrier, then we would be foregoing habitat that is used sometimes already.

Also from just experience in working with some of the restoration practitioners, in particularly I worked a lot with the Bureau of Land Management down in Oregon, they – to get private landowners to agree to restoration actions or the removal of culverts on their land, they basically demonstrate -- they get the landowners to go along by taking care of their culverts and their restoration first and then work with the landowners to try and get them to get theirs as well.

So I think it would be -- that's not necessarily a

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technical issue, but it's sort of from a leverage standpoint of trying to get those restoration actions, it's sort of important for the feds and the states to demonstrate.

Q To act as role models, then, in effect?

A I would think so.

Q Okay. Dr. Koenings also discussed the effect of climate change. And I believe he discussed that in relationship to state-owned culverts, for example.

What is your view on whether the climate change should be a basis for accelerating the repair of culverts or not accelerating the repair of culverts?

A So I think that the predictions for climate change are obviously that we're going to see changes in stream flows and changes in stream temperature. And in terms of restoration actions -- and actually, myself and Dr. Beechie have been working on a paper to talk

about how to address restoration under climate change, which types of actions you might do.

And obviously, the critical thing is if we're going to see changes in water temperature, we need to have -- we need to make sure that the fish have access to all these different habitats that they might use; that they have access to some of the upstream habitats where usually the water temperature is lower. So one of the best things under a climate change scenario is to make sure that we're -- all the habitats are connected and the fish have access. Because otherwise, if

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the temperature's going up, they're not going to be able to move into the cool water refuges.

Q So they need more habitat rather than less?

A Yeah. Well, more, and access to those habitats.

Q In his testimony, both his written testimony and I believe on the stand, Dr. Koenings discussed the entire four H process, and we need to address all of the Hs and so forth.

I was left at least with the implication that there's necessarily a tradeoff between, say, correcting state-owned culverts on Department of Transportation roads and correcting hatchery management actions or habitat management actions?

Do you see any kind of tradeoff in that regard?

A Between -- the tradeoff --

Q Between restoring connectivity by fixing culverts on state-owned roads and that necessarily reduce the

amount of effort that would be devoted to corrections in the other Hs?

A I don't think so. I mean, it seems that the discussion is mainly over what types of habitat restoration would be funded, as the funds are -- the funds that are being used for habitat restoration are not coming from the same sources. And most of these other activities that we've been discussing are already being addressed through other processes.

Q Okay. Thank you.

Earlier in this trial, the court has asked prior witnesses what they would do if there was a new bushel of

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money that dropped out of the sky, I believe, and what would they do differently, what would they do the same with respect to habitat restoration.

Would your approach to habitat restoration activities, your suggested approach focus in on, for example, restoring connectivity, would that change if more money was available?

A Well, yes and no. I think that we would – initially because it's going to take some time to do kinds of proper assessments and limiting factors analyses in each watershed, that we would go with our interim approach that we've proposed and focus on, you know, protecting the high-quality habitats, reconnecting the isolated habitats, because that's -- again, we know the response time is quick, and it's been shown to be critical for a number of listed salmon species, if that's what we've lost, habitat. And then focus on some of these other restoration of other watershed processes,

like the delivery of wood, water and sediment. And then once we had -- so that would be the initial approach.

And then as we complete the limiting factors analyses, we can refine that, change that, and focus in on things that would be most important for the particular species of interest.

Q Now, as we heard this morning in testimony from the Department of Transportation, this funding isn't inexhaustible. There are some limitations to funding. We

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all know that from our personal lives as well as the current economy.

If money is limited, would your priorities be as you suggested?

A Yeah. I think we're in the same situation, because I don't think we can -- we can't necessarily stop to spend all our money doing limiting factors analyses. So we would follow the same approach until we get some other information that suggests otherwise.

Q And so that would involve still correcting the barriers to fish passage, reconnecting habitats, for example?

A Yeah. So I think the starting points are obviously protecting habitat, and that's been borne out in the literature and conservation biology for years, that we have to protect the good stuff and stem the tide of habitat loss, and then focus on reconnecting isolated habitats. Some of that would be culverts and those types of barriers. Some of that might be removing

levies or dikes to isolated areas for habitats is important for different species.

MR. MONSON: Thank you.

Your Honor, may I have a moment to consult with counsel? I believe I might be through. Your Honor, I have no further questions of this witness on direct. Thank you.

THE COURT: Cross-examination, Mr. Ferester?

MR. FERESTER: Your Honor, first I'd like to address

FRANKLIN PIERCE,

Dec. 26, 1854

PRESIDENT OF THE UNITED STATES OF AMERICA,

TO ALL AND SINGULAR TO WHOM THESE PRESENTS SHALL COME, GREETING:

Title

WHEREAS a treaty was made and concluded on the She-nah-nam, or Medicine Creek, in the Territory of Washington, on the twenty-sixth day of December, one thousand eight hundred and · fifty-four, between the United States of America and the Nisqually and other bands of Indians, which treaty is in the words following, to wit:—

Articles of agreement and convention made and concluded on the She- nah-nam, or Medicine Creek, in the Territory of Washington, this twenty-sixth-day of December, in the year one thousand eight hundred and fifty- four, by Isaac I. Stevens, governor and superintenddent of Indian affairs of the said Territory, on the part of the United States, and the under-signed chiefs, headmen, and delegates of the Nisqually, Puyallup, Steilacoom, Squawksin, S'Homamish, Steh-chass, T'Peeksin, Squi-aitl, and Saheh-wamish tribes and bands of Indians, occupying the lands lying round the head of Puget's Sound and the adjacent inlets, who, for the purpose of this treaty, are to

be regarded as one nation, on behalf of said tribes and bands, and duly authorized by them.

Cession to United States.

ARTICLE I. The said tribes and bands of Indians hereby cede, relinquish, and convey to the United States, all their right, title, and interest in and to the lands and country occupied by them, bounded and described as follows, to wit: Commencing at the point on the eastern side of Admiralty Inlet, known as Point Pully, about midway between Commencement and Elliott bays ; thence running in a southeasterly direction, following the divide between the waters of the Puyallup and Dwamish, or White rivers, to the summit of the Cascade Mountains ; thence southerly, along the summit of said range, to a point opposite the main source of the Skookum Chuck Creek ; thence to and down said creek, to the coal mine ; thence northwesterly, to the summit of the Black Hills ; thence northerly, to the upper forks of the Satsop River ; thence northeasterly, through the portage known as Wilkes's Portage, to Point Southworth, on the western side of Admiralty Inlet ; thence around the foot of Vashon's Island, easterly and southeasterly, to the place of beginning.

Reservation for

ARTICLE II. There is, however, reserved for the present use and occupation of the said tribes and bands, the following tracts of land, viz : The small

said tribes.

island called Klah-che-min, situated opposite the mouths of Hammersley's and Totten's inlets, and separated from Hartstene Island by Peale's Passage, containing about two sections of land by estimation; a square tract containing two sections, or twelve hundred and eighty acres, on Puget's Sound, near the mouth of the She-nah-nam Creek, one mile west of the meridian line of the United States land survey, and a square tract containing two sections, or twelve hundred and eighty acres, lying on the south side of Commencement Bay; all which tracts shall be set apart, and, so far as necessary, surveyed and marked out for their exclusive use ; nor shall any white man be permitted to reside upon the same without permission of the tribe and the superintendent or agent. And the said tribes and bands agree to remove to and settle upon the same within one year after the ratification of this treaty, or sooner if the means are furnished them. In the mean time, it shall be lawful for them to reside upon any ground not in the actual claim and occupation of citizens of the United States, and upon any ground claimed or occupied, if with the permission of the owner or claimant. If necessary for the public convenience, roads may be run through their reserves, and, on the other hand, the right of way with free access

Removal thereto.

Roads may be constructed.

from the same to the nearest public highway is secured to them.

Right to fish.

ARTICLE III. The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands: *Provided, however,* That they shall not take shell fish from any beds staked or cultivated by citizens, and that they shall alter all stallions not intended for breeding horses, and shall keep up and confine the latter.

Payments for said cession.

ARTICLE IV. In consideration of the above cession, the United States agree to pay to the said tribes and bands the sum of thirty-two thousand five hundred dollars, in the following manner, that is to say: For first year after the ratification hereof, three thousand two hundred and fifty dollars ; for the next two years, three thousand dollars each year ; for the next three years two thousand dollars each year ; for the next four years fifteen hundred dollars each year ; for the next five years twelve hundred dollars each year, and for the next five years one thousand dollars each year ; all which said sums of money shall be applied to the use and benefit of the said Indians, under the

How applied.

direction of the President of the United States, who may from time to time determine, at his discretion, upon what beneficial objects to expend the same. And the superintendent of Indian affairs, or other proper officer, shall each year inform the President of the wishes of said Indians in respect thereto.

Expense of removal, &c.

ARTICLE V. To enable the said Indians to remove to and settle upon their aforesaid reservations, and to clear, fence, and break up a sufficient quantity of land for cultivation, the United States further agree to pay the sum of three thousand two hundred and fifty dollars, to be laid out and expended under the direction of the President, and in such manner as he shall approve.

Removal from said reservation.

ARTICLE VI. The President may hereafter, when in his opinion the interests of the Territory may require, and the welfare of the said Indians be promoted, remove them from either or all of said reservations to such other suitable place or places within said Territory as he may deem fit, on remunerating them for their improvements and the expenses of their removal, or may consolidate them with other friendly tribes or bands. And he may further, at his discretion, cause the whole or any portion of the lands hereby reserved, or of such other land as may be selected in lieu thereof, to be surveyed into lots, and assign the same to such individ-

uals or families as are willing to avail themselves of the privilege, and will locate on the same as a permanent home, on the same terms and subject to the same regulations as are provided in the sixth article of the treaty with the Omahas, so far as the same may be applicable. Any substantial improvements heretofore made by any Indian, and which he shall be compelled to abandon in consequence of this treaty, shall be valued under the direction of the President, and payment be made accordingly therefor.

Annuities not to be taken for debts.

ARTICLE VII. The annuities of the aforesaid tribes and bands shall not be taken to pay the debts of individuals.

Stipulations respecting conduct of Indians.

ARTICLE VIII. The aforesaid tribes and bands acknowledge their dependence on the government of the United States, and promise to be friendly with all citizens thereof, and pledge themselves to commit no depredations on the property of such citizens. And should any one or more of them violate this pledge, and the fact be satisfactorily proved before the agent, the property taken shall be returned, or in default thereof, or if injured or destroyed, compensation may be made by the government out of their annuities. Nor will they make war on any other tribe except in self-defence, but will submit all matters of difference between them and other Indians to the government of the United States, or its agent, for decision,

and abide thereby. And if any of the said Indians commit any depredations on any other Indians within the Territory, the same rule shall prevail as that prescribed in this article, in cases of depredations against citizens. And the said tribes agree not to shelter or conceal offenders against the laws of the United States, but to deliver them up to the authorities for trial.

ARTICLE IX: The above tribes and bands are desirous to exclude from their reservations the use of ardent spirits, and to prevent their people from drinking the same ; and, therefore, it is provided, that any Indian belonging to said tribes, who is guilty of bringing liquor into said reservations, or who drinks liquor, may have his or her proportion of the annuities withheld from him or her for such time as the President may determine.

Intemperance.

ARTICLE X. The United States further agree to establish at the general agency for the district of Puget's Sound, within one year from the ratification hereof, and to support, for a period of twenty years, an agricultural and industrial school, to be free to children of the said tribes and bands, in common with those of the other tribes of said district, and to provide the said school with a suitable instructor or instructors, and also to provide a smithy and carpenter's shop, and furnish them with the necessary tools, and employ a blacksmith, carpenter, and

Schools, shops, &c.

farmer, for the term of twenty years, to instruct the Indians in their respective occupations. And the United States further agree to employ a physician to reside at the said central agency, who shall furnish medicine and advice to their sick, and shall vaccinate them ; the expenses of the said school, shops, employees, and medical attendance, to be defrayed by the United States, and not deducted from the annuities.

Slaves to be freed.

ARTICLE XI. The said tribes and bands agree to free all slaves now held by them, and not to purchase or acquire others hereafter.

Trade out of the limits of the U.S. forbidden.

Foreign Indians not to reside on reservetion.

ARTICLE XII. The said tribes and bands finally agree not to trade at Vancouver's Island, or elsewhere out of the dominions of the United States; nor shall foreign Indians be permitted to reside in their reservations without consent of the superintendent or agent.

Treaty, when to take effect.

ARTICLE XIII. This treaty shall be obligatory on the contracting parties as soon as the same shall be ratified by the President and Senate of the United States.

In testimony whereof, the said Isaac I. Stevens, governor and superintendent of Indian Affairs, and the

undersigned chiefs, headmen, and delegates of the aforesaid tribes and bands, have hereunto set their hands and seals at the place and on the day and year hereinbefore written.

ISAAC I. STEVENS, [L. S.]

Governor and Superintendent Territory of Washington.

QUI-EE-METL,	his x mark. [L. S.]
SNO-HO-DUMSET,	his x mark. [L. S.]
LESH-HIGH,	his x mark. [L. S.]
SLIP-O-ELM,	his x mark. [L. S.]
KWI-ATS,	his x mark. [L. S.]
STEE-HIGH,	his x mark. [L. S.]
DI-A-KEH,	his x mark. [L. S.]
HI-TEN,	his x mark. [L. S.]
SQUA-TA-HUN,	his x mark. [L. S.]
KAHK-TSE-MIN,	his x mark. [L. S.]
SONAN-O-YUTL,	his x mark. [L. S.]
KL-TEHP,	his x mark. [L. S.]
SAHL-KO-MIN,	his x mark. [L. S.]
T'BET-STE-HEH-BIT,	his x mark. [L. S.]
TCHA-HOOS-TAN,	his x mark. [L. S.]
KE-CHA-HAT,	his x mark. [L. S.]
SPEE-PEH,	his x mark. [L. S.]

SWE-YAH-TUM, his x mark. [L. S.]
CHAH-ACHSH, his x mark. [L. S.]
PICH-KEHD, his x mark. [L. S.]
S'KLAH-O-SUM, his x mark. [L. S.]
SAH-LE-TATL, his x mark. [L. S.]
SEE-LUP, his x mark. [L. S.]
E-LA-KAH-KA, his x mark. [L. S.]
SLUG-YEH, his x mark. [L. S.]
HI-NUK, his x mark. [L. S.]
MA-MO-NISH, his x mark. [L. S.]
CHEELS, his x mark. [L. S.]
KNUTCANU, his x mark. [L. S.]
BATS-TA-KOBE, his x mark. [L. S.]
WIN-NE-YA, his x mark. [L. S.]
KLO-OUT, his x mark. [L. S.]
SE-UCH-KA-NAM, his x mark. [L. S.]
SKE-MAH-HAN, his x mark. [L. S.]
WUTS-UN-A-PUM, his x mark. [L. S.]
QUUTS-A-TADM, his x mark. [L. S.]
QUUT-A-HEH-MTSN, his x mark. [L. S.]
YAH-LEH-CHN, his x mark. [L. S.]
TO-LAHL-KUT, his x mark. [L. S.]
YUL-LOUT, his x mark. [L. S.]
SEE-AHTS-OOT-SOOT, his x mark. [L. S.]

YE-TAHKO,	his x mark. [L. S.]
WE-PO-IT-EE,	his x mark. [L. S.]
KAH-SLD,	his x mark. [L. S.]
LA'H-HOM-KAN,	his x mark. [L. S.]
PAH-HOW-AT-ISH,	his x mark. [L. S.]
SWE-YEHM,	his x mark. [L. S.]
SAH-HWILL,	his x mark. [L. S.]
SE-KWAHT,	his x mark. [L. S.]
KAH-HUM-KLT,	his x mark. [L. S.]
YAH-KWO-BAH,	his x mark. [L. S.]
WUT-SAH-LE-WUN,	his x mark. [L. S.]
SAH-BA-HAT,	his x mark. [L. S.]
TEL-E-KISH,	his x mark. [L. S.]
SWE-KEH-NAM,	his x mark. [L. S.]
SIT-OO-AH,	his x mark. [L. S.]
KO-QUEL-A-CUT,	his x mark. [L. S.]
JACK,	his x mark. [L. S.]
KEH-KISE-BE-LO,	his x mark. [L. S.]
GO-YEH-HN,	his x mark. [L. S.]
SAH-PUTSH,	his x mark. [L. S.]
WILLIAM,	his x mark. [L. S.]

Executed in the presence of us : —

M. T. Simmons,
Indian Agent.

JAMES DOTY
Secretary of the Commission.

C. H. MASON,
Secretary Washington Territory.

W. A. SLAUGHTER,
1st Lieut. 4th Infantry.

JAMES MCALISTER,

E. GIDDINGS, jr.,

GEORGE SHAZER,

HENRY D. COCK,

S. S. FORD, jr.,

JOHN W. McALISTER,

CLOVINGTON CUSHMAN,

PETER ANDERSON,

SAMUEL KLADY,

W. H. PULLEN,

P. O. HOUGH,

E. R. TYERALL,

GEORGE GIBBS,

BENJ. F. SHAW, *Interpreter*,

HAZARD STEVENS.

And whereas the said treaty having been submitted to the Senate of the United States, for its constitutional action thereon, the Senate did, on the third day of March, one thousand eight hundred and fifty-five, advise and consent to the ratification of its articles by a resolution in the words and figures following, to wit : —

"IN EXECUTIVE SESSION, SENATE OF THE UNITED STATES,

"March 3, 1855.

"*Resolved*, (two thirds of the senators present concurring,) That the Senate advise and consent to the ratification of the articles of agreement and convention made and concluded on the She-nah-nam, or Medicine Creek, in the Territory of Washington, this twenty-sixth day of December, in the year one thousand eight hundred and fifty-four, by Isaac I. Stevens, governor and superintendent of Indian affairs of the said Territory, on the part of the United States, and the undersigned chiefs, headmen, and delegates of the Nisqually, Puyallup, Steilacoom, Squawksin, S'Hom-amish, Steth-chass, T'Peeksin, Squi-aitl, and Sa-heh-wamish tribes and bands of Indians occupying the lands lying round the head of Puget's Sound and the adjacent inlets, who, for the purpose of this treaty, are to be regarded as one nation, on behalf of said

tribes and bands, and duly authorized by them.

"Attest : ASBURY DICKINS,

"Secretary."

Now, therefore, be it known that I, FRANKLIN PIERCE, President of the United States of America, do, in pursuance of the advice and consent of the Senate, as expressed in their resolution of the third day of March, one thousand eight hundred and fifty-five, accept, ratify, and confirm the said treaty.

In testimony whereof, I have caused the seal of the United States to be hereto affixed, having signed the same with my hand.

[L. S.] Done at the city of Washington, this tenth day of April, in the year of our Lord one thousand eight hundred and fifty-five, and of the independence of the United States the seventy-ninth.

FRANKLIN PIERCE

by the President :
W. L. MARCY, *Secretary of State.*

[Original Page 1]

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Nooksack, Steilacoom, Samish,
Snohomish, and Suquamish
Indian Tribes

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA

UNITED STATES OF AMERICA Plaintiff and QUILEUTE, MAKAH, LUMMI, MUCKLESHOOT, SQUAXIN ISLAND, SKOKOMISH, LOWER ELWHA, SNOQUALMIE, DUWAMISH, YAKIMA, STILLAGUAMISH, SAUK-SUIATTLE, HOH, NISQUALLY, SWINOMISH, TULALIP, PUYALLUP, QUINAULT, UPPER SKAGIT, NOOKSACK, STEILACOOM, SUQUAMISH, SAMISH, SNOHOMISH, SWINOMISH, PORT GAMBLE AND SNOQUALMIE INDIAN TRIBES Plaintiff-Intervenors vs. STATE OF WASHINGTON Defendant and STATE OF WASHINGTON DEPARTMENT OF FISHERIES and STATE OF WASHINGTON DEPARTMENT OF GAME Defendant-Intervenors.	CIVIL NO. 9 2 1 3 AMENDED AND SUPPLEMENTAL COMPLAINT FOR DECLARATORY JUDGMENT

RECEIVED
SEP 29 1976
DEPARTMENT OF GAME
ATTORNEY GENERAL'S OFFICE

JURISDICTION

This amended complaint is supplemental to the complaint filed by Plaintiff United States and Plaintiff Indian Tribes at

[Original Page 4]

The economic development of the State, the growth of the State's non-Indian population and the agricultural and industrial advances of recent times, have resulted in a fishery vastly different from the fishery existing at the time of the treaties which was primarily an Indian fishery. The size and nature of fish populations have been substantially altered by numerous activities impairing or destroying the acquatic habitats necessary to maintain them. Whole watersheds have been rearranged or destroyed to make room for development; fresh and saltwater systems have been polluted and subjected to changes in flow, level velocity and temperature; migration routes have been restricted or blocked; spawning beds have been damaged or destroyed; artificially introduced fish populations have displaced native populations; predator and disease problems have been aggravated; and generally the ecological balance necessary to maintain the Indian fishery has been seriously tampered with. This destruction or alteration of fish habitats could have been controlled or prevented in part by the Defendant State and its agencies, but was not. Much of it actually occurred pursuant to explicit administrative authorization contained in State-issued permits and approvals.

During this same period of growth, a large non-Indian commercial fishery came into being, providing employment and economic opportunities for a substantial portion of the citizenry. The increasing demands of this commerical fishery have threatened the survival of the resource. An expanding sport fishery has further increased this pressure. The Defendant State, at all times prior to this Court's Final Decision No. 1, has had the power to prevent the substantial diminution of the fishery resource by limiting sporting and commerical licensing, but has elected not to do so.

[Original page 1]

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UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON

UNITED STATES OF AMERICA Plaintiff and QUILEUTE, MAKAH, LUMMI, MUCKLESHOOT, SQUAXIN ISLAND, SKOKOMISH, LOWER ELWHA, SNOQUALMIE, DUWAMISH, STILLAGUAMISH, SAUK-SUIATTLE, NISQUALLY, SWINOMISH, TULALIP, PUYALLUP, QUINAULT, UPPER SKAGIT, YAKIMA, NOOKSACK, STEILACOOM, SAMISH, SNOHOMISH, and PORT GAMBLE CLALLAM INDIAN TRIBES Plaintiff-Intervenors, vs. STATE OF WASHINGTON Defendant and STATE OF WASHINGTON DEPARTMENT OF FISHERIES and STATE OF WASHINGTON DEPARTMENT OF GAME Defendant-Intervenors.	CIVIL NO. 9213 AMENDED AND SUPPLEMENTAL COMPLAINT FOR DECLARATORY JUDGMENT

JURISDICTION

This amended complaint is supplemental to the complaints filed by Plaintiff United States and Plaintiff Indian Tribes at the commencement of this lawsuit or in intervention, and is filed at the specific request of this Court made in June of 1976. Trial of

[Original Page 4]

State's non-Indian population and the agricultural and industrial advances of recent times, have resulted in a fishery vastly different from the fishery existing at the time of the treaties which was primarily an Indian fishery. The size and nature of fish populations have been substantially altered by numerous activities impairing or destroying the aquatic habitats necessary to maintain them. Whole watersheds have been rearranged or destroyed to make room for development; fresh and saltwater systems have been polluted and subjected to changes in flow, level, velocity and temperature; migration routes have been restricted or blocked; spawning beds have been damaged or destroyed; artificially introduced fish populations have displaced native populations; predator and disease problems have been aggravated; and generally the ecological balance necessary to maintain the Indian fishery has been seriously tampered with. This destruction or alteration of fish habitats could have been controlled or prevented in part by the Defendant State and its agencies, but was not. Much of it actually occurred pursuant to explicit administrative authorization contained in State-issued permits and approvals.

During this same period of growth, a large non-Indian commercial fishery came into being, providing employment and economic opportunities for a substantial portion of the citizenry. The increasing demands of this commercial fishery have threatened the survival of the resource. An expanding sport fishery has further increased this pressure. The Defendant State, at all times prior to this Court's Final Decision No. 1, has had the power to prevent the substantial diminution of the fishery resource by limiting sporting and commercial licensing, but has elected not to do so.

[Original Page 1]

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON

UNITED STATES OF AMERICA, et al., Plaintiffs, v. STATE OF WASHINGTON, et al., Defendants.	NO. 9213-II PLAINTIFF'S SUPPLEMENTAL MEMORANDUM IN SUPPORT OF MOTION FOR PARTIAL SUMMARY JUDGMENT

Plaintiff, United States of America, hereby submits its Supplemental Memorandum in Support of Motion For Partial Summary Judgment.

I

INTRODUCTION

In our initial memorandum we contend that the Federal treaty fishing right involved in this litigation reserves to treaty tribes a right to have the fishery resource protected from adverse environmental actions or inactions of the State of Washington. In support of that contention we set forth and substantiated several arguments: that the treaty fishing right recognized in Final Decision No. 1 presupposes a measure of environmental protection for the salmon/steelhead resource; that the treaties must be construed to effect the purposes for which they were signed; that

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described in general (see e.g., 01 - Nooksack - 01 to 05). The major streams within the WRIA are then described and illustrated with photographs and maps. Both the general description of the WRIA and the specific stream descriptions contain a section entitled "Limiting Factors." According to the Catalog:

> Limiting factors refer to conditions that lead to a complete loss or reduction of the environment's fish producing potential, excluding harvest or exploitation. They include only those conditions presently considered alterable.

The tribal watershed reports are also geographical. They do not track the Stream Catalog exactly because the location of the tribes did not correspond with the WRIA delineations. The watershed reports do, however, include WRIA numbers and stream numbers which correspond to the Stream Catalog system. Thus, by reviewing the Stream Catalog and the watershed reports, one is able to get a geographical perception of the extent to which man's activities are impacting the waterways of the case area.

Because of the geographical approach of the Stream Catalog and the watershed reports, the discussion which follows will focus instead on the different types of habit-affecting activity and the extent to which those activities are currently impacting the case area. The activities which we will explore include: logging, culvert placement, dams and other obstructions, channelization, gravel removal, livestock, agriculture, water withdrawal, urbanization, estuarine development, water pollution, and removal of streamside cover. The division of habitat-impacting activity into categories is, of course, somewhat arbitrary. When a logging company fails to provide an adequate streamside buffer zone, and, as a result, a salmon stream receives excessive silt, the resultant impact can be labeled "water pollution" as well as

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"logging." Likewise, the destruction of a stream bank by grazing cattle can as easily be described as "removal of streamside cover" as "livestock." We have tried, however, to create categories which would separate and reflect the most significant types of activity taking place. In other words, logging could be included in removal of streamside cover and water pollution, but we felt that as an activity, it is significant enough to merit its own section. Thus, while there is undoubted overlap, we have attempted to define the activities in such a way so as to make them mutually exclusive.

1. Dams and Other Obstructions.

This category includes any[38/] man-made structure which constitutes a total or partial barrier to migrating salmon or steelhead. It also includes a dam which, while not impeding migration, causes other adverse impacts upon the resource, such as low flows, flow fluctuations, nitrogen supersaturation, etc.

Without question, dams and other man-made obstructions have had greater impact on salmon and steelhead runs than any other single type of environmental activity. The JBS states that "[t]he most dramatic change, often causing a complete loss of the salmon and steelhead environment on stream systems in Washington State, is the series of dams which has been completed in the last 40 years." PE-3, p. 23. See, complete discussion, Id. at 23-25. The Stream Catalog noted:

> The construction of dams on major rivers and streams for hydropower and storage or for creation of a lake or reservoir for land real estate

---

38/ The figures which we use and the examples which we cite are meant to exclude Federal, federally-licensed and tribal activities.

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The tribal watershed reports identified 499 incidents of habitat damage due to channelization. PE-37 through PE-51. According to those reports, the impact of channelization is being especially felt on the Nooksack River, Squalicum Creek, and Whatcom Creek (PE-37); the Skagit River (PE-38); Montague Creek and French Creek (PE-39); Thornton Creek, McAleer Creek, Lyon Creek, Issaquah Creek, Juanita Creek, and especially the Cedar River (PE-40); the Puyallup River (eighteen miles channelized -- PE-42); the Skokomish River (PE-45); and the Hoh River (PE-49).

4. Culverts.

We use the term "culvert" to refer to any pipe, conduit, tunneled drain, arched passageway, or other waterway constructed to convey water across or beneath a street, highway, railway, parking lot, or similar area.

Since culverts convey water and thus become a part of the case area waterways, improper culvert placement, size, or gradient will prevent the upstream migration of salmon and steelhead.

Culverts are rarely identified as limiting factors in the Stream Catalog. See e.g., PE-3, 19 - Lyre Hoko - 601; 20 - Soleduck Hoh - 05, 401, 1101, 1701.

The improper placement of culverts is, however, a chronic problem in streams supporting migratory fish. The watershed reports list 136 improperly placed culverts which currently exist in the case area. PE-37 through PE-51.

5. Gravel Removal.

According to the Department of Fisheries Stream Catalog:

> Removal of riverbed materials, particularly gravel, results in reduced spawning areas and causes continuous and excessive bed load

No. 17-269

In The
Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.

Respondents.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

BRIEF FOR THE PETITIONER

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QUESTIONS PRESENTED

In a series of treaties, the federal government promised northwest Indian tribes "[t]he right of taking fish, at all usual and accustomed grounds and stations . . . in common with all citizens[.]" This Court has held that this language guarantees the tribes "a fair share of the available fish," meaning fifty percent of each salmon run, revised downward "if tribal needs may be satisfied by a lesser amount." *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 685 (1979).

In this case, the Ninth Circuit held that the treaties instead guaranteed "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a. On that basis, the panel held that the treaties require Washington to replace culverts under state roads that restrict salmon passage. The court ordered the State to replace hundreds of culverts, at a cost of several billion dollars, even though it is undisputed that: (1) the federal government—the lead Plaintiff—specified the design and granted permits for the overwhelming majority of culverts at issue, and (2) many culvert replacements will have no benefit for salmon because of other non-State owned barriers to salmon on the same streams.

The questions presented are:

1. Whether the treaty "right of taking fish, at all usual and accustomed grounds and stations . . . in common with all citizens" guaranteed "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes."

2. Whether the district court erred in dismissing the State's equitable defenses against the federal government where the federal government signed these treaties in the 1850s, for decades told the State to design culverts a particular way, and then filed suit in 2001 claiming that the culvert design it provided violated the treaties it signed.

3. Whether the district court's injunction violates federalism and comity principles by requiring Washington to replace hundreds of culverts, at a cost of several billion dollars, when many of the replacements will have no impact on salmon and Plaintiffs showed no clear connection between culvert replacement and tribal fisheries.

PARTIES

Petitioner is the State of Washington, which was the defendant at trial and appellant at the Ninth Circuit.

Respondents are the United States of America; Confederated Tribes and Bands of the Yakama Nation; Hoh Indian Tribe; Jamestown S'Klallam Tribe; Lower Elwha Klallam Tribe; Lummi Nation; Makah Tribe; Muckleshoot Indian Tribe; Nisqually Indian Tribe; Nooksack Tribe; Port Gamble S'Klallam Tribe; Puyallup Tribe; Quileute Indian Tribe; Quinault Indian Nation; Sauk-Suiattle Tribe; Skokomish Indian Tribe; Squaxin Island Tribe; Stillaguamish Tribe of Indians; Suquamish Indian Tribe; Swinomish Indian Tribal Community; Tulalip Tribes; and Upper Skagit Indian Tribe. Respondents were the plaintiffs at trial and the appellees at the Ninth Circuit.

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INTRODUCTION

In 1854 and 1855, the federal government signed treaties with many northwest Indian tribes protecting their "right of taking fish, at all usual and accustomed grounds and stations . . . in common with all citizens[.]" This Court has interpreted this clause many times, holding that it guarantees the signatory tribes three key rights: (1) access to traditional fishing places, (2) preemption of certain fishing regulations, and (3) "a fair share of the available fish," up to half of each salmon run. Exercising these rights, Washington tribes take millions of salmon annually.

In this case, the Ninth Circuit announced a new right, broader than any previously recognized. The court held that the treaties implicitly promised "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a. The court held that the State of Washington was violating this right because some culverts under state roads impede salmon access to potential habitat. Although the federal government—the lead Plaintiff—specified the design of and granted permits for the very culverts it now claims violate the treaties, the court rejected the State's attempt to raise equitable defenses. And the court ordered the State to spend vast sums replacing culverts even though many replacements will not benefit salmon at all. This holding suffers from three flaws warranting reversal.

First, nothing in the text, the negotiating history, the parties' understanding, or this Court's precedent supports the notion that the treaties promised a moderate living from fishing. That untenable standard makes it impossible to measure

compliance, would likely render illegal many past actions that impacted salmon (such as federal dams), and would make virtually any significant future land use decision in the Pacific Northwest subject to court oversight to determine treaty compliance. It is also unnecessary. Washington already has every incentive to protect salmon for the benefit of all Washingtonians, including tribal members, and the United States has extensive powers to protect salmon. And contrary to the Ninth Circuit's fears, the State neither claims nor desires a right to "destroy" salmon fisheries. The treaties and countless state and federal laws would prevent that.

Second, the Ninth Circuit erred in affirming dismissal of the State's equitable defenses. It held that equitable defenses are unavailable when the federal government brings treaty claims on behalf of tribes. Pet. App. 96a-99a. That holding ignored this Court's precedent and was remarkably unfair. The federal government specified how the State should build culverts, granted permits for their construction, and then decades later sued the State, saying that those same culverts violated treaties the federal government entered 150 years earlier.

Finally, the sweeping injunction imposed here ignores constitutional limits on the proper scope of injunctive relief against States. "[T]he injunction requires [Washington] to replace or repair all 817 culverts located in the area covered by the Treaties without regard to whether replacement of a particular culvert actually will increase the available salmon habitat." Pet. App. 37a. A federal court ordering a state to spend money on projects that will make no difference flies in the face of federalism principles.

OPINIONS BELOW

The amended, final Ninth Circuit decision below is reported at 853 F.3d 946 (2017). Pet. App. 58a-126a. The order denying rehearing en banc is reported at 864 F.3d 1017 (2017). Pet. App. 1a-57a. An opinion respecting denial of rehearing en banc by Judge O'Scannlain, and joined in full by judges Kozinski, Tallman, Callahan, Bea, Ikuta, and N.R. Smith, and joined as to all but part IV by judges Bybee and M. Smith, is at Pet. App. 17a-41a. An opinion concurring in denial of review en banc by panel judges W. Fletcher and Gould is at Pet. App. 6a-17a.

The district court's summary judgment ruling is reported at 20 F. Supp. 3d 828 (W.D. Wash. 2007). Pet. App. 249a-72a. The district court's injunctive rulings are reported at 20 F. Supp. 3d 986 (W.D. Wash. 2013). Pet. App. 127a-79a, 235a-42a. The district court's order striking the State's equitable defenses is reported at 19 F. Supp. 3d 1317 (W.D. Wash. 2001). Pet. App. 273a-82a. The district court's supplement to memorandum and decision and its order on motions in limine are unreported. Pet. App. 180a-234a; 243a-48a.

JURISDICTION

The order denying rehearing en banc issued on May 19, 2017. Pet. App. 1a. This Court has jurisdiction under 28 U.S.C. § 1254(1).

STATUTES

The treaties at issue in this case provide, in substantially identical language:

> The said tribes and bands of Indians hereby cede, relinquish, and convey to the United States, all their right, title, and interest in and to the lands and country occupied by them[.]

Each treaty also provides:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory . . . .

Treaty with the Nisquallys, Puyallup Etc. 1854 (Medicine Creek Treaty), arts. I, III, 10 Stat. 1132, 1133 (Dec. 26, 1854, ratified Mar. 3, 1855, proclaimed Apr. 10, 1855) (JA 786a, 788a).[1]

STATEMENT

A. Historical Salmon Runs and Treaty Negotiations

In 1854 and 1855, the United States negotiated eleven treaties with Indian tribes in what are now the

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[1] *See also* Treaty with the Dwámish Etc. Indians (Point Elliott Treaty), arts. I, V, 12 Stat. 927, 928 (Jan. 22, 1855, ratified Mar. 8, 1859, proclaimed Apr. 11, 1859); Treaty with the S'Klallam (Point No Point Treaty), arts. I, IV, 12 Stat. 933, 934 (Jan. 26, 1855, ratified Mar. 8, 1859, proclaimed Apr. 29, 1859); Treaty with the Makah, arts. I, IV, 12 Stat. 939, 940 (Jan. 31, 1855, ratified Mar. 8, 1859, proclaimed Apr. 18, 1859); Treaty with the Yakama, arts. I, III, 12 Stat. 951, 953 (June 9, 1855, ratified Mar. 8, 1859, proclaimed Apr. 18, 1859); Treaty with the Qui-nai-elt, Etc. (Olympia Treaty), arts. I, III, 12 Stat. 971, 972 (Jan. 25, 1856, ratified Mar. 8, 1859, proclaimed Apr. 11, 1859).

states of Idaho, Montana, Oregon, and Washington. *See generally Seufert Bros. Co. v. United States*, 249 U.S. 194, 196-97 (1919). In the treaties, the tribes ceded to the United States "all their right, title, and interest" in the lands they occupied while reserving a right to continue fishing at traditional locations: "The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory . . . ." Medicine Creek Treaty, arts. I, III, 10 Stat. at 1132, 1133 (JA 786a, 788a).[2]

This case involves six of those treaties that were signed by tribes that historically fished in western Washington, from Grays Harbor northward (this "Case Area" is shown at JA 286a, 287a, 530a).[3] At treaty time, about 7,600 Indians lived in western Washington, a fraction of the present Indian population. *United States v. Washington*, 384 F. Supp. 312, 352 (W.D. Wash. 1974), *aff'd*, 520 F.2d 676 (9th

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[2] *See supra* n.1; Treaty with the Walla-Walla, art. I, 12 Stat. 945, 946 (June 9, 1855, ratified Mar. 8, 1859, proclaimed Apr. 11, 1859); Treaty with the Nez Percés, art. III, 12 Stat. 957, 958 (June 11, 1855, ratified Mar. 8, 1859, proclaimed Apr. 29, 1859); Treaty with the Tribes of Middle Oregon, art. I, 12 Stat. 963, 964 (June 25, 1855, ratified Mar. 8, 1859, proclaimed Apr. 18, 1859); Treaty with the Flatheads, Etc., art. III, 12 Stat. 975, 976 (July 16, 1855, ratified Mar. 8, 1859, proclaimed Apr. 18, 1859).

[3] *See Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 662 n.2 (1979) (listing treaties at issue in this case and tribes that signed them); *id.* at 670 n.15 (describing case area).

Cir. 1975).[4] Salmon were one of their primary food sources. *United States v. Washington*, 384 F. Supp. at 406.

Salmon hatch in fresh water rivers and streams, migrate to the ocean to mature, and return to their fresh-water place of origin to spawn. *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 662 (1979) (*Fishing Vessel*). Natural conditions cause salmon runs to fluctuate, and "the Indians' harvest of fish was subject to the vagaries of nature which occasionally imperiled their food supply and caused near starvation." *United States v. Washington*, 384 F. Supp. at 351.

At the treaty negotiations, a primary concern of the Indians "was that they have freedom to move about to gather food, particularly salmon[.]" *Id.* at 355. They relied on the federal negotiators' assurances that they would be able to continue their off-reservation fishing practices, while understanding that non-Indians would also be allowed to fish at Indian fishing locations. *Id.*; *Fishing Vessel*, 443 U.S. at 667-68.

For the federal government the "principal purposes of the treaties were to extinguish Indian claims to the land in Washington Territory and provide for peaceful and compatible coexistence of

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[4] Today, the 21 Plaintiff Tribes have approximately 43,000 enrolled members. Washington State Senate Governmental Operations Committee, *Indian Tribes in Washington State: Brief Summary* (Nov. 20, 2014), https://app.leg.wa.gov/CMD/Handler.ashx?MethodName=getdocumentcontent&documentId=lxyKR26odSQ&att=false.

Indians and non-Indians in the area." *United States v. Washington*, 384 F. Supp. at 355. In the negotiations, "[t]he United States was also a surrogate for future states. It wanted to remove the cloud of Indian sovereign control from most of the West so that new states could govern most lands within their boundaries free of complications with Indians." Charles Wilkinson, *American Indians, Time, and the Law* 101 (Yale Univ. Press 1987).[5]

"At the time the treaties were executed there was a great abundance of fish and a relative scarcity of people." *Fishing Vessel*, 443 U.S. at 675; *id.* at 668 (same). Indeed, although the salmon runs varied from year to year, they were "thought inexhaustible." *Id.* at 669; *see* Pet. App. 135a. Thus, as the trial court found: "It was not deemed necessary to write any protection for the [salmon] into the treat[ies] because nothing in any of the parties' experience gave them reason to believe that would be necessary." Pet. App. 269a.

B. Salmon Runs Declined Over Time, Often Due to Federal Actions

Unfortunately, salmon abundance has declined over time as the human population has exploded, so that the "resource has now become scarce." *Fishing Vessel*, 443 U.S. at 669. A number of salmon populations in western Washington remain healthy,

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[5] *See also United States v. Winans*, 198 U.S. 371, 384 (1905) ("[E]xtinguishment of the Indian title, opening the land for settlement, and preparing the way for future states, were appropriate to the objects for which the United States held the Territory."); *Tulee v. Washington*, 315 U.S. 681, 682 (1942) (describing federal goals); *Seufert Bros.*, 249 U.S. at 197 (same).

Pet. App. 136a; JA 258a, 583a, and western Washington tribes take roughly 2.5 million salmon annually, JA 247a. But other western Washington salmon populations are ailing, with four listed as threatened under the Endangered Species Act. Pet. App. 167a; 50 C.F.R. § 223.102 (2016); JA 255a-57a.

Many factors have reduced salmon runs, including habitat alteration, hydropower development, overharvesting, and climate change. Pet. App. 121a, 130a, 132a, 174a: JA 252a-53a, 279a-82a, 490a-97a, 586a, 672a, 799a-805a. The federal government contributed significantly to these problems.

For example, the Federal Power Commission granted licenses for hydroelectric dams throughout Washington, some of which destroyed salmon runs. *See, e.g., City of Tacoma v. FERC*, 460 F.3d 53, 61-62 (D.C. Cir. 2006) (describing "devastating drop in the fish populations" caused by federally-licensed dam in 1924). The U.S. Army Corps of Engineers dredged harbors and straightened rivers that flowed into Puget Sound, destroying salmon habitat. *See* JA 496a; Pet. App. 130a.[6] And the Corps of Engineers constructed locks connecting Lake Washington to Puget Sound, destroying the river into which the lake had previously flowed, along with its salmon runs and Indian fishing places. *United States v. Washington*, 384 F. Supp. at 367; Pub. L. No. 61-264, 36 Stat. 630,

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[6] *See also Puyallup Indian Tribe v. Port of Tacoma*, 717 F.2d 1251, 1254 (9th Cir. 1983) (describing Corps' straightening of Puyallup River); *Commercial Waterway Dist. 1 v. Permanente Cement Co.*, 61 Wash. 2d 509, 511, 379 P.2d 178 (1963) (describing Corps' dredging of Duwamish Waterway).

666 (1910); *In re Westlake Ave.*, 66 Wash. 277, 119 P. 798 (1911) (describing federal role).

C. Washington State's Efforts to Preserve and Restore Salmon

Salmon have long been a vital part of Washington's economy and culture, with tens of thousands of Washingtonians employed in the fishing industry and hundreds of thousands more engaging in recreational salmon fishing.[7] Since the earliest days of salmon scarcity, Washington has taken steps to preserve and restore salmon runs, devoting enormous effort and billions of dollars to this goal.

Salmon numbers in Washington first declined in the late 1800s and early 1900s as technological advances led to overfishing. *Fishing Vessel*, 443 U.S. at 668-69; JA 132a-33a; *United States v. Washington*, 384 F. Supp. at 352. In response, the State—not the federal government—enacted laws and regulations to protect the fishery. *See, e.g., Vail v. Seaborg*, 120 Wash. 126, 130, 207 P. 15 (1922) (describing state fishing regulations enacted in response to the "well-known fact that the salmon industry of the state is rapidly disappearing").[8] In the decades since, the State has enacted many laws to protect salmon

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[7] *See, e.g.*, https://wdfw.wa.gov/publications/00464/.

[8] The State acknowledges and regrets that some of these regulations discriminated against Indians. *Fishing Vessel*, 443 U.S. at 669. The State has created a process to allow Indians convicted of criminal fishing offenses during that time to vacate their convictions. *See* Wash. Rev. Code § 9.96.060(4).

specifically and the State's natural environment generally.[9]

The State has also operated hatcheries—the first built in 1895—to replace fish lost through overharvesting and environmental change. *United States v. Washington*, 759 F.2d 1353, 1359-60 (9th Cir. 1985) (en banc). The State has invested over $1 billion in hatchery programs, and operates dozens of hatcheries today, at an annual cost of roughly $30 million.[10]

Washington has long been a leader nationally in preserving and restoring fish habitat. The legislature has enacted comprehensive laws to choose, fund, and implement programs and projects that improve conditions for salmon. *See, e.g.*, Wash. Rev. Code 77.85; Wash. Rev. Code 77.95; Wash. Rev. Code 90.71; JA 313a-15a. Overseen by the Governor's Salmon Recovery Office, local organizations develop regional salmon recovery plans. Wash. Rev. Code §§ 77.85.090, .150; JA 272a-73a. The locally-developed plans call for a variety of habitat restoration projects. JA 272a-73a. In 2007, the National Marine Fisheries Service adopted Washington's recovery plans for salmon in the Puget Sound region. 72 Fed. Reg. 2493-02 (Jan. 19, 2007); 72 Fed. Reg. 29121-02

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[9] *See, e.g.*, Salmon Recovery Act, Wash. Rev. Code 77.85; Salmon Enhancement Program, Wash. Rev. Code 77.95; State Environmental Policy Act, Wash. Rev. Code 43.21C; State Shoreline Management Act, Wash. Rev. Code 90.58; Growth Management Act, Wash. Rev. Code 36.70A; Water Pollution Control, Wash. Rev. Code 90.48; Construction Projects In State Waters, Wash. Rev. Code 77.55.

[10] *See* https://wdfw.wa.gov/hatcheries/overview.html.

(May 24, 2007). A State website tracks salmon recovery actions, https://stateofsalmon.wa.gov//.

The State also created a Salmon Recovery Funding Board that awards grants to tribes, local governments, and private landowners for salmon projects. Wash. Rev. Code §§ 77.85.110-.140; Pet. App. 155a-56a; JA 273a-75a, 315a. Since its creation in 1999, that Board has awarded over $586 million in grants for salmon recovery projects.[11] Other State programs provide support for other salmon habitat restoration projects. JA 276a-79a, 415a; *see* Wash. Rev. Code § 76.13.150 (assistance to small forest landowners in removing fish passage barriers).

The State has also worked with tribes to oppose construction of certain fish-blocking dams, to have certain dams removed, and to secure protection for salmon in the federal licenses issued for others. *See, e.g., PUD 1 of Jefferson Cty. v. Washington Dep't of Ecology*, 511 U.S. 700, 703 (1994) (describing State permit conditions on dam "to protect salmon and steelhead runs" on the Dosewallips River); *City of Tacoma v. Taxpayers of Tacoma*, 357 U.S. 320, 322-33 (1958) (describing State's 10-year effort to block dams on the Cowlitz River because of effects on salmon); *City of Tacoma v. State*, 121 Wash. 448, 451, 209 P. 700 (1922) (describing state objection to dam because "the proposed dam . . . will destroy, or seriously damage, the propagation of salmon" in the Skokomish River); JA 271a-72a; https://www.nps.gov/

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[11] https://www.rco.wa.gov/grants/eval_results.shtml#srfb.

olym/learn/nature/elwha-ecosystem-restoration.htm (describing tribal, state, and federal partnership to restore salmon in the Elwha River after removal of two dams).[12]

In recent decades, the State has worked closely with Tribes to conserve and enhance salmon runs. State law requires state agencies to establish government-to-government relations with Indian tribes. Wash. Rev. Code 43.376. Tribal leaders and staff serve on the Salmon Recovery Funding Board,[13] the Puget Sound Partnership,[14] the Ecosystem Coordination Board,[15] the Fish Barrier Removal Board,[16] the Cooperative Monitoring, Evaluation, and Research Committee,[17] the Timber, Fish, and Wildlife Policy Committee,[18] and boards of Regional Fisheries Enhancement Groups.[19] The State has awarded numerous grants to tribes to participate in salmon recovery efforts, including $8.7 million in 2018 to

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[12] *See also* 80 Fed. Reg. 4546-01 (Jan. 28, 2015) (describing tribal/state plans to enhance Elwha River salmon).

[13] *See* https://www.rco.wa.gov/boards/srfb_profiles.shtml#Troutt.

[14] *See* http://www.psp.wa.gov/index.php.

[15] *See* Wash. Rev. Code § 90.71.250(2)(d).

[16] *See* Wash. Rev. Code § 77.95.160(1).

[17] *See* Wash. Admin. Code § 222-12-045(2)(b)(i).

[18] *See* Wash. Admin. Code § 222-12-045(2)(b)(ii).

[19] *See* JA 275a.

eight of the Plaintiff Tribes and a tribal cooperative.[20] Pet. App. 155a-56a; JA 274a-75a, 415a. The State regularly collaborates with tribes on important decisions affecting salmon. *See, e.g.*, JA 254a, 263a-64a, 272a-73a, 279a, 584a, 593a-94a, 687a.[21]

D. Prior Decisions Interpreting the Treaties

This Court has interpreted the treaty language at issue here many times.

The first case was *United States v. Winans*, 198 U.S. 371 (1905). In the 1890s, non-Indian landowners fenced off a trail to a traditional Indian fishing place in Washington and erected large harvesting machines called "fish wheels." The United States sued, and this Court held that the landowners could not exclude the Indians from traditional fishing places. *Id.* at 381. The Court ruled that "the Indians were given a right in the land, the right of crossing it to the river, the right to occupy it" for fishing purposes. *Id.*; *see also Seufert Bros.*, 249 U.S. at 199 (same holding as to land in Oregon).

This Court next ruled that the treaties preempted a state license fee applied to a Yakama Indian. *Tulee v. Washington*, 315 U.S. 681 (1942). "[S]uch exaction of fees as a prerequisite to the enjoyment of fishing in the 'usual and accustomed places' cannot be reconciled with a fair construction of

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[20] https://www.rco.wa.gov/doc_pages/press/2018/177.shtml.

[21] *See also, e.g.*, 72 Fed. Reg. 2493-02 (Jan. 19, 2007) (adopting Puget Sound Chinook recovery plan developed by state, tribes, and others); 72 Fed. Reg. 29121-02 (May 24, 2007) (adopting Hood Canal summer chum recovery plan developed by tribes, state, and others).

the treaty." *Tulee*, 315 U.S. at 685. However, "the treaty leaves the state with power to impose on Indians equally with others such restrictions of a purely regulatory nature concerning the time and manner of fishing outside the reservation as are necessary for the conservation of fish[.]" *Id.* at 684.

That statement in *Tulee* became a holding in *Puyallup Tribe v. Department of Game of Washington*, 391 U.S. 392 (1968), where the Court held that the Medicine Creek Treaty did not preempt state power "expressed in nondiscriminatory measures for conserving fish resources," *id.* at 399. When that case returned a few years later, this Court held that state regulations that barred Indians from using fishing nets at traditional fishing sites were discriminatory and thus preempted because they effectively allocated the entire steelhead catch to non-Indians. *Dep't of Game of Washington v. Puyallup Tribe*, 414 U.S. 44 (1973). The Court remanded so that the available fish could be "fairly apportioned between Indian net fishing and non-Indian sports fishing[.]" *Id.* at 48-49. The third *Puyallup Tribe* case upheld an allocation of "45% of the annual natural steelhead run available for taking to the treaty fishermen's net fishery." *Puyallup Tribe, Inc. v. Dep't of Game of Washington*, 433 U.S. 165, 177 (1977).

In 1970, while the *Puyallup Tribe* litigation was occurring, the United States and a number of tribes initiated this case, which focused first on allocating the fish available. The United States alleged that the right of taking fish entitled the Tribes to a fair share of the salmon passing their traditional fishing places. *See Fishing Vessel*, 443 U.S. at 670. The Tribes, however, contended that the treaties entitled them "to

as many fish as their commercial and subsistence needs dictated." *Fishing Vessel*, 443 U.S. at 670. The district court agreed with the United States and held that the treaty right, being "in common with" other people, entitles the Tribes to a fair share of available fish. *United States v. Washington*, 384 F. Supp. at 401. The court set the tribal share at 50%. *Id.* at 343-44, 416.

This Court consolidated several cases for review, *see Fishing Vessel*, 443 U.S. at 669-74, and generally affirmed the district court's interpretation. The Court held that the right of taking fish "in common" means "[b]oth sides have a right, secured by treaty, to take a fair share of the available fish." *Id.* at 684-85. Agreeing with the United States, the Court said equal shares were "equitable," but, like any equitable remedy, the injunction could be modified for changed circumstances. For example, if in the future a tribe did not need 50% of the available fish for a "livelihood" or "moderate living," that allocation might be unreasonable, and the State could ask for a downward adjustment. *Id.* at 685-87.

After this Court's remand 39 years ago, the case never ended. In 1980, responding to a request by the tribes and the United States, the district court declared that the treaties implicitly imposed on the State a duty not to impair fish habitat. *United States v. Washington*, 506 F. Supp. 187, 205-07 (W.D. Wash. 1980). It read *Fishing Vessel* to require "a sufficient quantity of fish to satisfy [] moderate living needs." *Id.* at 208. A Ninth Circuit panel rejected that reasoning: the "environmental servitude" imposed by the district court had no basis in the treaties or

precedent. *United States v. Washington*, 694 F.2d 1374, 1375, 1377 & n.7, 1380-82, 1387 (9th Cir. 1982). Rather, the State, United States, and tribes were equally obligated to take "reasonable steps" to preserve and enhance the fishery. *Id.* at 1374, 1375 & n.1, 1381, 1386. The en banc court then reviewed the panel decision, also rejecting the district court's reasoning. "*Fishing Vessel* did not hold that the Tribes were entitled to any particular minimum allocation of fish. Instead, *Fishing Vessel* mandates an allocation of 50 percent of the fish to the Indians, subject to downward revision if moderate living needs can be met with less." *United States v. Washington*, 759 F.2d at 1358-59. It declined to announce a broad rule governing salmon habitat, saying that "the State's precise obligations and duties under the treaty . . . will depend for their definition and articulation upon concrete facts which underlie a dispute in a particular case." *Id.* at 1357.

Since 1985, dozens more "sub-proceedings" have been filed, mostly intertribal disputes. *See generally United States v. Washington*, 573 F.3d 701, 704-05, 709-10 (9th Cir. 2009) (describing the sub-proceeding process and one intertribal dispute). "Judges in the Western District of Washington have now been regulating fishing in the Puget Sound for 35 years," and "the court has become a regulatory agency perpetually to manage fishing." *Id.* at 709. As detailed next, this sub-proceeding began in 2001.

E. Facts and Proceedings in this Case

1. Roadbuilding and Culverts in Washington

Culverts are engineered structures that allow streams to pass under roads, and they can range from simple pipes to "stream simulation" designs that mimic natural stream conditions. Pet. App. 77a, 209a-13a, 221a-26a (examples of culverts); JA 385a-88a. Culverts are often necessary for roads in Washington because of the abundance of streams, and their costs vary widely depending on culvert type, stream conditions, and highway size and location. *See* Pet. App. 214a-17a.

Washington began building highway culverts in large numbers when it accepted Congress's invitation to participate in the federal-aid highway program a century ago. *See* Act of July 11, 1916, ch. 241, 39 Stat. 355; 1917 Wash. Sess. Laws, page no. 260 (codified as amended Wash. Rev. Code § 47.04.050). In the early 20th century, automobiles created a demand for better roads. *See generally* Richard F. Weingroff, Federal Highway Administration, *Federal Aid Road Act of 1916: Building the Foundation*, 60 Public Roads No. 1 (1996). Congress responded by creating a partnership with States. The federal government provided partial funding for highways if states constructed them to federal design standards under federal oversight. *E.g.*, Pub. L. No. 85-767, § 106, 72 Stat. 885, 892 (1958) (codified as amended at 23 U.S.C. § 106); Act of July 11, 1916,

ch. 241, § 6, 39 Stat. at 357-58.[22] Today, all Washington state highways are federal-aid highways as described in 23 U.S.C. § 103. *See* Wash. Rev. Code § 47.17.001.

Federal law has long treated culverts as integral parts of the highways covered by federal-aid laws. Act of July 11, 1916, ch. 241, § 2, 39 Stat. at 356 ("culverts shall be deemed parts of the respective roads covered by the provisions of this Act"); 23 U.S.C. § 101(a)(11)(B) ("highway" includes "drainage structure . . . in connection with a highway"). The federal government specified designs for highway culverts and distributed culvert engineering guidance to state highway departments. JA 100a-01a, 119a; Levin, 38 Neb. L. Rev. at 393-96. The Corps of Engineers issued nationwide permits specifying conditions under which road culverts are approved under the Clean Water Act. *See* 33 C.F.R. §§ 323.4, 323.4-3(a)(3) (1978). The Corps also issued individual permits for culverts under 33 C.F.R. § 323.4-4 (1978).

Washington relied on federal design standards, guidance, and permit conditions in building its culverts. JA 78a-79a, 100a, 375a. Until the mid-1990s, virtually all state highway culverts in Washington were built to federally-supplied design standards. JA 101a, 375a. The federal government never

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[22] *See generally Nashville, Chattanooga & St. Louis Ry. v. Walters*, 294 U.S. 405, 417-21 (1935) (describing extensive federal involvement in state highway construction); David R. Levin, *Federal Aspects of the Interstate Highway Program*, 38 Neb. L. Rev. 377 (1959); Richard F. Weingroff, Federal Highway Administration, ***100th Anniversary–An Evolving Partnership***, 78 Public Roads No. 3 (2014).

suggested that the State would be violating treaty rights by using federal culvert designs or complying with federal permits. JA 101a, 375a.

By 1968, this federal-state partnership had completed nearly all of the approximately 7000 miles of state highways currently present in Washington. JA 179a-80a, 398a. But the State has continued to modify, expand, and update highways, and it builds and replaces culverts in doing so.

In the 1990s, state scientists concluded that federal culvert designs were often difficult for fish to pass because they increased water velocity or turbidity, became blocked by debris, or for other reasons. JA 373a-75a. The State began identifying fish-barrier culverts under state highways and replacing them. Pet. App. 141a, 147a, 153a, 195a; JA 295a, 297a. Washington became a national leader in developing new culvert designs that better allow fish passage, receiving awards from the federal government for its breakthroughs. Pet. App. 137a, 144a; JA 224a, 373a, 389a-90a.

As of 2013, the State had inventoried more than 3,000 culverts in the state highway system. Within the *United States v. Washington* "Case Area," the State found 817 culverts that partially or totally blocked 200 meters or more of potential salmon habitat. Pet. App. 142a, 164a; JA 225a-26a, 324a-25a. State scientists developed a formula, known as the "Priority Index," to enable decision-makers to compare different culvert projects. Pet. App. 145a; JA 302a-08a. The formula considers how much habitat is upstream from a state culvert, the cost of replacing the culvert, and whether the culvert is a

partial or total barrier, but it does not consider other factors such as whether other barriers (like dams) block some of the upstream habitat or whether the habitat is degraded in other ways. Pet. App. 247a; JA 308a-09a, 311a. In part because the formula omits these other factors, it does not dictate the order in which the State replaces culverts. Pet. App. 145a; JA 308a, 328a-29a, 384a-85a.

The State has two processes for correcting state highway culverts. First, it corrects culverts as part of other highway construction projects that improve safety and capacity. Pet. App. 148a; JA 370a, 376a-77a. Second, the State created a separate budget in 1991 for stand-alone "fish passage projects," the first in the nation. Pet. App. 148a; JA 377a-78a. Between 1991 and 2013 the State corrected 256 barrier culverts in the state highway system, improving salmon access to over 850 miles of stream habitat statewide. JA 226a, 394a-95a.

To date, the State has spent over $174 million on stand-alone culvert projects in the state highway system.[23] Costs have increased significantly over time as the State tackles increasingly complex culvert replacements, with the average cost of stand-alone projects completed in 2016 at $2.3 million,[24] and in

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[23] *See* note 25 *infra*; Washington State Dep't of Transp., *WSDOT Fish Passage Performance Report*, Table 2 (June 30, 2017), https://www.wsdot.wa.gov/publications/fulltext/projects/FishPassage/2017FishPassageAnnualReport.pdf.

[24] *See id.* Table 2.

2017 at $3.4 million.[25] The State has also replaced many other culverts as part of larger highway or road projects, without separately identifying culvert correction costs. Pet. App. 149a-52a, 170a.

State-owned culverts are a small fraction of the barrier culverts in Washington. Pet. App. 203a. Federal, tribal, and local governments, as well as private landowners, own roads with barrier culverts. JA 97a, 121a-22a, 416a, 439a, 638a-39a. Though the total number is unknown, the state Fish Barrier Removal Board estimates 40,000 fish passage barriers in Washington.[26] Non-state barrier culverts outnumber state barrier culverts in some watersheds by as much as 36 to 1. Pet. App. 203a; JA 285a, 397a, 439a, 444a-45a. Because there are so many non-state barriers, the State has focused its culvert replacement efforts on streams with no other barriers, where replacing the state barrier actually provides additional habitat for salmon. Pet. App. 269a; JA 328a-29a, 384a.

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[25] *See id.* Table 3; WSDOT project pages: https://www.wsdot.wa.gov/Projects/I5/FisherCreekFP/default.htm; https://www.wsdot.wa.gov/Projects/SR531/EdgecombCreekFishPassage/default.htm; https://www.wsdot.wa.gov/Projects/I90/nforkissaquahcrkfishpassage/default.htm; https://www.wsdot.wa.gov/Projects/SR202/LittleBearCreek/default.htm; https://www.wsdot.wa.gov/Projects/SR900/greenckfishbarrier/default.htm; https://www.wsdot.wa.gov/Projects/US101/MatriottiCrkRmvFishBarrier/default.htm; https://www.wsdot.wa.gov/Projects/SR112/NordstromCrkRmvFishBarrier/default.htm; https://www.wsdot.wa.gov/Projects/SR504/woostercrkfishpassage/default.htm.

[26] https://wdfw.wa.gov/about/advisory/fbrb/.

Washington's highways benefit all Washingtonians, including tribal members. State highways support a range of tribal enterprises.[27] For example, 16 of the 21 Plaintiff Tribes operate casinos, virtually all within a short distance of state highways.[28] The Tribes invite the public to use state highways to travel to tribal casinos, golf courses, resorts, luxury hotels, retail stores, and other businesses.[29]

2. District Court Proceedings

In 2001, the federal government joined 21 tribes in initiating this "sub-proceeding," claiming that State culverts violate the treaties by reducing the number of salmon in Washington waters. JA 41a-64a; *see* Pet. App. 127a. The State denied that it had violated the treaties and asserted that the United States was barred by equitable principles from seeking relief given that the culverts were designed to federal standards or installed under federal permits. JA 78a-83a, 86a-87a. The trial court granted the

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[27] *See, e.g., Citizens For Safety & Env't v. Washington Dep't of Transp.*, 2004 WL 2651499 (Wash. Ct. App. 2004) (upholding state highway permit for Muckleshoot Tribe's amphitheatre).

[28] *See* https://www.wsgc.wa.gov/tribal-gaming/casino-locations.

[29] *See, e.g.*, http://www.washingtontribes.org; Jamestown S'Klallam Tribe, https://www.7cedarsresort.com/; Muckleshoot Indian Tribe, http://www.muckleshoot.nsn.us/government/tribal-enterprises.aspx; Suquamish Indian Tribe, https://www.whitehorsegolf.com/contactus/directions/; Swinomish Indian Tribal Community, http://www.swinomishcasinoandlodge.com/form/contact-us; Tulalip Tribes, https://www.tulalipresortcasino.com/Home/Directions, http://www.premiumoutlets.com/outlet/seattle/about.

United States' pre-discovery motion to strike those defenses. Pet. App. 274a-75a. After this Court decided *City of Sherrill v. Oneida Indian Nation of New York*, 544 U.S. 197 (2005), the State asked the district court to reconsider its order striking equitable defenses. *See* JA 7a. The district court declined without comment. *See* Pet. App. 249a-72a.

In 2006, the parties cross-moved for summary judgment on whether the culverts violated the treaties. The trial court granted the tribes' motion and denied the State's. Pet. App. 249a-72a. The court found that "fish harvests have been substantially diminished," and drew a "logical inference that a significant portion of this diminishment is due to the blocked culverts[.]" Pet. App. 263a. The court acknowledged that nothing in the treaties' text prohibited state actions that incidentally affected salmon runs: "[i]t was not deemed necessary to write any protection for the resource into the treaty because nothing in any of the parties' experience gave them reason to believe that would be necessary." Pet. App. 269a. But it concluded that statements made by federal negotiators at some treaty councils "carried the implied promise that neither the negotiators nor their successors would take actions that would significantly degrade the resource," and found that "the building of stream-blocking culverts" is a "resource-degrading activity." Pet. App. 270a. The court declared that the treaties impose "a duty upon the State to refrain from building or operating culverts under State-maintained roads that hinder fish passage and thereby diminish the number of fish that would otherwise be available for Tribal harvest." Pet. App. 271a. The court "further declare[d] that the

State of Washington currently owns and operates culverts that violate this duty." Pet. App. 271a.

The court held a trial on the remedy in 2009. Pet. App. 128a. The court granted the State's motion in limine to exclude as "too speculative" the tribes' evidence estimating how many salmon were "lost" because of state-owned culverts. Pet. App. 245a-47a. The court also directed the parties to submit proposed Findings of Fact and Conclusions of Law. *See* JA 25a. The State argued that the plaintiffs had not demonstrated entitlement to an injunction, in part because there was no evidence of any connection between state culverts and the amount of salmon available to any tribe, or evidence that an injunction would increase any tribe's salmon catch. The State asked the court to let the state's culvert-removal program remain in place as part of a multi-faceted regional salmon recovery strategy. *See* JA 26a, 28a.

In 2013, the court adopted without change an injunction submitted by the United States and the Tribes. The injunction orders the State to replace any state-owned barrier culvert within the Case Area that "has 200 lineal meters or more of salmon habitat upstream to the first *natural* passage barrier," regardless of human-made barriers surrounding the state culvert. Pet. App. 237a (emphasis added). Thus, the State must replace its culverts even if other barriers upstream or downstream prevent salmon from reaching it. Pet. App. 37a. The court required the State to replace culverts with bridges or "stream simulation" culverts—the most expensive options—barring extraordinary circumstances, Pet. App. 239a,

even though less-costly designs have been approved for passing salmon by the National Marine Fisheries Service under the Endangered Species Act, Pet. App. 139a, 168a.

3. Ninth Circuit Proceedings

The State appealed, and the Ninth Circuit affirmed. Pet. App. 58a-126a. Based on statements made by Isaac Stevens, the United States' lead treaty negotiator, the panel held that the treaties included an implied promise "that there would be fish sufficient to sustain" the Tribes. Pet. App. 92a. The panel also said that even if Stevens had not made these statements, it would "infer a promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a.

The court found that "[s]almon now available for harvest are not sufficient to provide a 'moderate living' to the Tribes," and that "several hundred thousand additional mature salmon would be produced every year" if the State's blocking culverts were replaced—findings not made by the district court. Pet. App. 95a-96a. On this basis, the panel concluded that "Washington has violated, and is continuing to violate, its obligation to the Tribes under the Treaties" by "act[ing] affirmatively to build and maintain barrier culverts under its roads." Pet. App. 95a-96a.

The panel affirmed the district court's dismissal of the State's equitable defenses, distinguishing this Court's decision in *Sherrill*. Pet. App. 96a-99a.

Finally, the panel affirmed the district court's injunction, holding that it was not overbroad or inequitable. Pet. App. 104a-23a. The panel added that "an injunction enforcing Indian treaty rights should not be viewed in the same light" as an injunction to enforce other federal laws or constitutional rights, and may broadly intrude into state affairs. Pet. App. 124a-25a.

4. En Banc Proceedings

The State petitioned for rehearing en banc, which the Ninth Circuit denied. Pet. App. 6a. Judge O'Scannlain, joined by eight judges as to all but part IV, and by six judges as to part IV, filed an opinion respecting the denial of rehearing en banc. Pet. App. 17a-41a. Describing the panel opinion as a "runaway decision" that had "discovered a heretofore unknown duty" in the treaties, the dissent urged that the panel opinion made "four critical errors." Pet. App. 17a-19a.

First, the panel misread *Fishing Vessel* as holding that the treaties guarantee the Tribes enough salmon for a "moderate living." *Fishing Vessel* held only that the treaties secure to the Tribes a fair share of available fish, up to 50%, not a guaranteed quantity. Pet. App. 21a-26a.

Second, the dissent noted the absence of evidence connecting state culverts with tribal fisheries. Pet. App. 27a-29a. It pointed out that the panel's "overly broad reasoning" turns any activity that affects fish habitat into a treaty violation and turns federal courts into environmental policymakers. Pet. App. 28a-32a.

Third, in Part IV, the dissent urged that the panel opinion ignored *Sherrill*. It suggested that an equitable doctrine such as laches could bar relief because of the United States' involvement in designing the culverts and its long acquiescence in their existence. Pet. App. 32a-36a.

Finally, the dissent explained that the injunction was overbroad because it requires the State to spend large sums on culvert removals that will have no effect on salmon. Pet. App. 36a-41a.

SUMMARY OF ARGUMENT

Three fundamental errors infect the lower court opinions in this case and independently warrant reversal.

First, the extraordinarily broad new treaty right declared by the Ninth Circuit has no basis in the treaties' text, the parties' understanding, history, or precedent. It is also unnecessary and unworkable.

The treaties promise "[t]he right of taking fish . . . in common with all citizens[.]" The Ninth Circuit "inferred" from this language a "promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a. This new right is untethered from the treaty text, and as applied by the Ninth Circuit, runs contrary to the treaty text. The court held that this new right allows the signatory tribes to demand removal of off-reservation culverts (and presumably other development) that may affect salmon. But in the treaties the tribes expressly "cede, relinquish, and convey . . . all their right, title, and interest in and to the lands[.]" JA 786a. This Court has made clear that

even in liberally construing treaties in favor of Indians, courts should not invent terms or contradict other terms.

Because this new right is untethered from the text, the Ninth Circuit sought to justify it based on the parties' intentions. But as the district court correctly held, the parties did not intend "to write any protection for the [fish] into the treaty because nothing in any of the parties' experience gave them reason to believe that would be necessary." Pet. App. 269a.

The Ninth Circuit also sought to justify its ruling based on this Court's decisions in *Fishing Vessel*, 443 U.S. 658, and *Winters v. United States*, 207 U.S. 564 (1908). But *Fishing Vessel*, 443 U.S. at 670, rejected the Tribes' argument "that the treaties had reserved a pre-existing right to as many fish as their commercial and subsistence needs dictated," instead adopting the federal government's position that the treaties promised "a fair share of the available fish," capped at half of each salmon run, *id.* at 685-86. And the *Winters* doctrine, which deals with implied water rights appurtenant to an Indian reservation, cannot justify the Ninth Circuit's ruling. While this Court has held that implying water rights is essential to achieve the purpose of an Indian reservation, there is no similar necessity here to create an implied right to control off-reservation activity. The State already has powerful incentives to preserve salmon runs (which are shared equally with the Tribes) and the federal government already has vast regulatory and spending powers to protect salmon.

The new treaty right is also unworkable. Neither respondents nor the lower courts have defined a "moderate living" from fishing, e.g., whether it is based on 1855 standards or today's standards, on the size of the Indian population at treaty time or the vastly larger population today, etc. This amorphous rule makes it impossible for the State and others to know what past actions might have violated the treaties and be subject to challenge and what future actions are allowed under the treaties.

The lower courts' second error was dismissing the State's equitable defenses against the federal government. The federal government now claims that the State's highway culverts violate treaties the federal government signed. But the federal government *provided the design* for the culverts and granted federal permits for them. Understandably, the State invoked equitable defenses to bar the United States from seeking relief.

The Ninth Circuit affirmed dismissal of these defenses on two flawed rationales. The court first reasoned that allowing equitable defenses to treaty claims would abrogate treaty rights, which only Congress can do. But equitable defenses do not abrogate treaty rights; they affect what remedies are available to enforce those rights. *Sherrill*, 544 U.S. at 213. The court next reasoned that equitable defenses to treaty claims are available only in the precise context presented in *Sherrill*. But *Sherrill* and this Court's other cases refute that idea. And the rationale for allowing equitable defenses is even more compelling here. *Sherrill* involved a tribe's attempt to regulate land within its historic reservation, land that the State purchased in violation of federal law. This

case involves a challenge to State conduct that was approved by the federal government and occurred off-reservation, where the tribes ceded control.

Finally, even if this Court concludes that the Ninth Circuit properly interpreted the treaties and dismissed the State's equitable defenses, it should vacate the overbroad injunction here. The injunction orders the State to replace its culverts even if other man-made barriers (such as federal or private culverts) entirely prevent salmon from reaching the State culvert. The injunction thus orders the State to waste money on culverts that have no impact on salmon. It also forces the State to spend vast sums replacing culverts without evidence that doing so will meaningfully improve tribal fisheries given the many other factors that affect salmon. And although injunctions are supposed to take equity into account, this injunction ignores the stark inequity of the federal government using a treaty it signed to force the State to bear the entire cost of replacing culverts that the federal government designed.

ARGUMENT

A. The Treaties Guarantee Important Rights, But Not a Particular Standard of Living from Fishing

Over the last century, this Court has held that the Stevens Treaties guarantee the signatory tribes three key rights: (1) access to traditional fishing places, *Winans*, 198 U.S. at 381-82, (2) preemption of certain state fishing regulations, *Puyallup Tribe*, 391 U.S. 392, and (3) "a fair share of the available fish,"

Fishing Vessel, 443 U.S. at 685. In this case, the Ninth Circuit recognized a new right broader than any previously declared. The court "infer[red] a promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a. This new right lacks support in the treaties' text, the negotiating history, the parties' understanding, and precedent. It is also unnecessary and unworkable. This Court should decline to recognize this new right 160 years after the Treaties were signed.

1. The Ninth Circuit's Inferred Right is Unsupported by Treaty Language

"The interpretation of a treaty, like the interpretation of a statute, begins with its text." *Abbott v. Abbott*, 560 U.S. 1, 10, (2010) (quoting *Medellín v. Texas*, 552 U.S. 491, 506 (2008)). The same is true for Indian treaties. The "starting point for any analysis" of Indian treaties "is the treaty language itself . . . interpreted in light of the parties' intentions[.]" *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 206 (1999); *see also Fishing Vessel*, 443 U.S. at 675 (a treaty "between the United States and an Indian tribe, is essentially a contract between two sovereign nations").

Although "treaties should be construed liberally in favor of the Indians," *Oklahoma Tax Comm'n v. Chickasaw Nation*, 515 U.S. 450, 465 (1995) (quoting *Cty. of Oneida v. Oneida Indian Nation of New York State*, 470 U.S. 226, 247, (1985)), they "cannot be re-written or expanded beyond their clear terms," *Choctaw Nation of Indians v. United States*, 318 U.S. 423, 432 (1943). This Court has therefore rejected claims that lacked support in treaty

language. *See, e.g., Chickasaw*, 515 U.S. at 466 ("[L]iberal construction cannot [overcome] a clear geographic limit in the Treaty."); *Oregon Dep't of Fish & Wildlife v. Klamath Indian Tribe*, 473 U.S. 753, 769-74 (1985). Indeed, in interpreting this very clause, this Court held that because "the Treaty is silent as to the mode or modes of fishing that are guaranteed," the treaties allowed nondiscriminatory state regulation of fishing methods. *Puyallup Tribe*, 391 U.S. at 398.

Applying this principle here, no text in the Stevens Treaties guarantees a permanent standard of living from fishing. The only clause the Ninth Circuit cited in concluding otherwise was "[t]he right of taking fish . . . in common with all citizens[.]" But nothing in that language says or implies "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes," as the Ninth Circuit held. Pet. App. 94a. Instead, this Court has held that the language means that "[b]oth sides have a right, secured by treaty, to take a fair share of the available fish. That, we think, is what the parties to the treaty intended when they secured to the Indians the right of taking fish in common with other citizens." *Fishing Vessel*, 443 U.S. 684-85.

Indeed, inferring a promised standard of living that implicitly secures power to limit off-reservation development contradicts clear treaty language. This reading would mean that the Treaties reserved what the Tribes have called an implied "negative easement or negative servitude" in all of the ceded lands, JA 109a, requiring current landowners to avoid development that might affect fish abundance. But the Treaties foreclose the servitude Respondents claim. The Tribes "cede, relinquish, and convey to the

United States, all their right, title, and interest in and to the lands and country occupied by them[.]" JA 786a. It is impossible to write broader language disclaiming proprietary and sovereign control. Meanwhile, the only easements affecting off-reservation lands created by the treaties are explicit. For example, the treaties explicitly guarantee tribal members access to "usual and accustomed" fishing places, preserving a servitude of access to known fishing sites recognized by this Court more than a century ago. *Winans*, 198 U.S. at 381; *Seufert Bros.*, 249 U.S. at 199. Some of the treaties explicitly guaranteed access to the public highway nearest the reservation. Medicine Creek Treaty art. II, 10 Stat. at 1133 (JA 787a-88a); Yakama Treaty, art. III, 12 Stat. at 953. But none include language granting the Tribes a right to control development in the future State. Instead, the cession in the treaties was intended to "further[] the national program" of allowing development. *Tulee v. Washington*, 315 U.S. 681, 682 (1942).

The treaty language also contradicts the notion that the tribes would make a living solely from fishing. Five of the treaties promise that the United States would send teachers of blacksmithing, carpentry, and farming, and help "break up a sufficient quantity of land for cultivation" within their reservations. *E.g.*, Medicine Creek Treaty, arts. V, X, 10 Stat. at 1133, 1134 (JA 789a, 791a-92a). Rather than restrict Indians to fishing, the treaties intended "to diversify [the] Indian economy[.]" *United States v. Washington*, 384 F. Supp. at 355; *see* JA 126a-27a, 130a-31a (describing diversity of treaty-time economic interaction between Indians and non-Indians and United States' desire to perpetuate it).

The Ninth Circuit's inferred promise of a moderate living from fishing and an implicit power to control off-reservation development are thus directly contrary to the Treaties' text, and "liberal construction cannot save the Tribe's claim." *Chickasaw Nation*, 515 U.S. at 466.

2. The Ninth Circuit's Inferred Right is Unsupported by History and Understanding

The negotiating history of the treaties and the parties' understanding also provide no support for implying a promised standard of living from fishing or an implicit servitude controlling State highways.

First, neither party intended the treaties to prohibit development that might affect salmon because neither side understood that salmon abundance might meaningfully decline—salmon "had always been thought inexhaustible." *Fishing Vessel*, 443 U.S. at 669; *see* JA 131a-32a, 139a. As the district court correctly held, the parties did not intend "to write any protection for the [fish] into the treaty because nothing in any of the parties' experience gave them reason to believe that would be necessary." Pet. App. 269a.

Despite this uncontroverted finding, the Ninth Circuit held that the parties intended to guarantee the Tribes a moderate living from fishing. It based this conclusion on statements by Isaac Stevens at some treaty councils to the effect that he wanted the treaties to secure the Tribes' access to salmon. Pet. App. 91a-92a. But Stevens' statements do not support an Indian understanding of control over off-reservation development that incidentally affects

salmon, because neither side understood that future development could meaningfully impact salmon runs. JA 131a-33a, 136a-39a. Both assumed that guaranteeing access to usual and accustomed fishing places would suffice to guarantee the Tribes' access to salmon. *Fishing Vessel*, 443 U.S. at 668; JA 128a-30a. This Court has repeatedly refused to turn incorrect assumptions into binding intentions. *See, e.g.*, *Chickasaw Nation*, 515 U.S. at 466-67 (rejecting treaty interpretation that treaty makers "likely gave no thought to"); *Nebraska v. Parker*, 136 S. Ct. 1072, 1082 (2016) ("expectations alone" cannot overcome statutory text); *Solem v. Bartlett*, 465 U.S. 463, 468-69 (1984) ("[W]e have never been willing to extrapolate from this [mistaken] expectation a specific congressional purpose."). Because the impact of development on salmon is something the parties "gave no thought to," the Ninth Circuit erred by inferring a promise contrary to treaty language. *Chickasaw Nation*, 515 U.S. at 466-67.

Second, the Ninth Circuit's inferred duty contravenes the United States' primary purpose in negotiating the treaties: "to remove the cloud of Indian sovereign control . . . so that new states could govern most lands within their boundaries." Charles Wilkinson, *American Indians, Time, and the Law* 101 (Yale Univ. Press 1987); *Fishing Vessel*, 443 U.S. at 661-62 (federal purpose was "[t]o extinguish" Indian land claims in Western Washington). By contrast, the State's interpretation would not defeat the Tribes' purpose of protecting "their right to take fish at usual and accustomed places." *Id.* at 667. As detailed below, the State has strong incentives to preserve salmon runs for the benefit of all Washington residents.

Third, interpreting the treaties to guarantee a particular standard of living from fishing and control over the ceded lands runs contrary to the parties' understanding of the treaties as demonstrated by their own behavior. *See Choctaw Nation*, 318 U.S. at 431-32 (interpreting treaty based on "the practical construction adopted by the parties"); *Oliphant v. Suquamish Indian Tribe*, 435 U.S. 191, 206 (1978) ("historical perspective casts substantial doubt upon" tribe's claim that treaty provided criminal jurisdiction over non-Indians). By the late 1800s, Washington salmon runs were in decline. *Fishing Vessel*, 443 U.S. at 668-69 & n.13; JA 133a. Yet even after that point, the federal government—despite its trust obligation to the Tribes—took numerous actions that decimated salmon populations in areas covered by the Treaties, e.g., building or licensing dams and canals that wiped out entire fisheries. *See supra* pp. 7-8. The federal government took these actions while simultaneously enforcing the treaties in court on other issues, never asserting the duty claimed today. *See Winans*, 198 U.S. 371; *Seufert Bros.*, 249 U.S. 194; *United States v. McGowan*, 62 F.2d 955 (9th Cir.), *aff'd*, 290 U.S. 592 (1933); *United States v. Alaska Packers' Ass'n*, 79 F. 152 (C.C.D. Wash. 1897); *United States v. Brookfield Fisheries, Inc.*, 24 F. Supp. 712 (D. Or. 1938); *United States v. Taylor*, 3 Wash. Terr. 88, 13 P. 333 (1887).

If the treaties obligated the federal government to ensure for the Tribes a moderate living from fishing, it has breached that obligation for decades. *See* Pet. App. 102a; JA 116a-17a. And if the treaties were intended to empower the United States or tribes to compel salmon restoration by the State or others, that understanding was never revealed by the parties'

conduct. In short, neither the negotiating history of the treaties nor the parties' understanding of the treaty language supports the extraordinary new right the Ninth Circuit inferred here.

3. The Ninth Circuit's Inferred Right is Unsupported by Precedent

This Court's precedent does not support inferring a treaty right to a moderate standard of living from fishing. Respondents and the Ninth Circuit cite *Fishing Vessel* and *Winters* as supporting such a right. Neither does so.

a. The *Fishing Vessel* Court refused to measure the treaty right by a standard of living

Fishing Vessel rejected the very rule the Ninth Circuit adopted here. In *Fishing Vessel*, 443 U.S. at 670, the Tribes "contended that the treaties had reserved a pre-existing right to as many fish as their commercial and subsistence needs dictated." "The United States argued that the Indians were entitled either to a 50% share of the 'harvestable' fish that . . . passed through their fishing places, or to their needs, *whichever was less*." *Id.* (emphasis added) (footnote omitted). The State argued for a lesser tribal share. *Id.* This Court "agree[d] with the Government," *id.* at 685, holding that the treaties "secure the Indians' right to take a share of each run of fish that passes through tribal fishing areas," *id.* at 679. The Court affirmed the district court's equitable allocation setting that share at 50%, but held that the share could be reduced in the future if a lesser share

were sufficient to "provide the Indians with a livelihood—that is to say, a moderate living." *Fishing Vessel* 443 U.S. at 686. Thus, "the 50% figure imposes a maximum but not a minimum allocation." *Id.*

Fishing Vessel thus made clear that the "moderate living" standard is an equitable limit the State could invoke in the future as a ceiling on the tribal share of the catch, not a floor on fish harvests that the treaties always guaranteed. Indeed, the Ninth Circuit repeatedly described *Fishing Vessel* this way, until this panel's opinion.[30]

Fishing Vessel is thus irreconcilable with the new right the Ninth Circuit created. If, as the panel held, the treaties "promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes," Pet. App. 94a, this Court would have had to accept the Tribes' position in *Fishing Vessel*, that they were entitled to as many fish as their "needs dictated." Instead, the Court held that the Tribes were entitled to at most one-half of the "available" catch from each run, even if that amount was less than their "needs dictated." 443 U.S. at 686. It cannot be that the treaties promised the Tribes both a "moderate living" from fishing and a "maximum" of 50% of each run. As Judge O'Scannlain said, "the panel opinion turns *Fishing Vessel* on

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[30] *See, e.g.*, *United States v. Washington*, 759 F.2d at 1359 ("*Fishing Vessel* did not hold that the Tribes were entitled to any particular minimum allocation of fish. Instead, *Fishing Vessel* mandates an allocation of 50 percent of the fish to the Indians, subject to downward revision if moderate living needs can be met with less."); *Skokomish Indian Tribe v. United States*, 410 F.3d 506, 513 (9th Cir. 2005) (en banc) (same).

its head" and "reads out the 50% ceiling entirely." Pet. App. 24a. Rather than supporting the Ninth Circuit's rule, *Fishing Vessel* makes clear that the rule cannot be the law.

b. The implied water rights doctrine of *Winters v. United States* depends on circumstances absent here

Respondents and the Ninth Circuit have also cited the reserved water rights doctrine announced in *Winters v. United States*, 207 U.S. 564 (1908), to support the claimed treaty right to a moderate standard of living from fishing. This reliance is misguided for several reasons.

First, Respondents' claim is that the State's culverts violate the Stevens Treaties. But "the 'reserved rights doctrine' is a doctrine built on implication" from reserving lands, not treaty rights. *United States v. New Mexico*, 438 U.S. 696, 715 (1978). This Court has held that where the federal government set aside land for a federal purpose, such as an Indian reservation, it must have intended to set aside "that amount of water necessary to fulfill the purpose of the reservation," even if no treaty or statute says so. *Id.* at 700; *Cappaert v. United States*, 426 U.S. 128, 141 (1976). The Ninth Circuit's reliance on this doctrine tacitly concedes that nothing in the Stevens Treaties supports the right it declared. And implying such a right in considering this treaty-based claim would violate this Court's repeated admonition that it will not add rights to treaties. *Choctaw Nation*, 318 U.S. at 432; *Chickasaw Nation*, 515 U.S. at 466-67; *Klamath Indian Tribe*, 473 U.S. at 769-74.

Second, the circumstances do not exist for creating this type of implied right here. *Winters* applies only in the narrow context of reserving water rights—interests in real property appurtenant to land—for Indian reservations and other federal lands, and only where the Court has "concluded that without the water the purposes of the reservation would be *entirely defeated*." *New Mexico*, 438 U.S. at 700 (emphasis added). This case does not involve the unique necessity of securing water rights for federal lands, where the necessity was apparent as of the moment the lands were reserved. And declining to find an implied right to a moderate living would not "entirely defeat[]" the purpose of the treaties at all. The Tribes take millions of salmon annually. JA 247a. And even without this implied right, the State has strong incentives and a demonstrated commitment to preserve salmon runs, which the Tribes will continue to share in equally. Moreover, the federal government has broad power to protect salmon—through laws, regulations, and funding decisions—without inferring a new right in these treaties, and has already enacted many other laws (from the Endangered Species Act to the Clean Water Act) that protect salmon. *See* note 31 *infra*.

Finally, even the *Winters* doctrine itself provides no basis for the amorphous obligation the Ninth Circuit announced. In applying the *Winters* doctrine, this Court has rejected the view "that the quantity of water reserved should be measured by the Indian's 'reasonably foreseeable needs,'" finding this measure too indeterminate. *Arizona v. California*, 460 U.S. 605, 617 (1983).

The bottom line is that precedent contradicts, rather than supports, the Ninth Circuit's conclusion.

4. The Ninth Circuit's Inferred Right is Unnecessary

The Ninth Circuit's primary rationale for inferring this new treaty right and corresponding duty on the State seems to have been that it had to do so to limit the State's ability to destroy the fishery. That is "utter nonsense." Pet. App. 27a n.8. Prior court orders, the treaties, other laws, and the State's own self-interest and responsibility to its residents would prevent that.

In enforcing the Stevens Treaties, this Court has already articulated several principles that courts could use to prevent destruction of the fishery.

First, this Court has compared the district court's role in enforcing its harvest sharing orders under the Treaties to overseeing a "proceeding *in rem* . . . to apportion a fishery[.]" *Fishing Vessel*, 443 U.S. at 692 n.32. The court "may enjoin those who would interfere with" the court's custody of the res, here, the fishery. *Id.* Thus, if anyone acted to destroy the fisheries that are subject to allocation, the district court could enjoin such destruction.

For example, the Ninth Circuit, in an opinion by then-Judge Kennedy, upheld an injunction barring the Yakama Nation from catching any spring Chinook salmon in the Columbia River during a year when "precariously low numbers of that salmon were" returning and "the safe passage of every salmon was necessary to preserve the species." *United States v. Oregon*, 657 F.2d 1009, 1011 (9th Cir. 1981). The Tribe

argued that the court could not enjoin it from fishing under the treaties. The court disagreed, citing this Court's "analog[y] to an equitable action in rem" and explaining that "[s]ince the existence of the salmon was inextricably linked to the res in the court's constructive custody, the court was empowered to enjoin interference with that custody." *Oregon*, 657 F.2d at 1015-16.

This Court has also made clear that the State cannot discriminate against tribes in managing salmon. *See, e.g., Fishing Vessel*, 443 U.S. at 682 (recognizing State authority "to impose nondiscriminatory regulations"); *Dep't of Game of Washington v. Puyallup Tribe*, 414 U.S. 44, 48 (1973); *Puyallup Tribe*, 391 U.S. at 398 (holding that the State may restrict Tribes in "the manner of fishing . . . in the interest of conservation" so long as the regulation "does not discriminate against the Indians"). Because of the Tribes' historical reliance on salmon, a State decision to destroy the fishery would necessarily involve some degree of discrimination against tribes, and could be enjoined on that basis as well.

Beyond these already-recognized protections, numerous state and federal laws protect salmon from destruction.[31] The notion that the State could choose to destroy the fishery absent the Ninth Circuit's right

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[31] **Federal laws:** *See, e.g.*, Clean Water Act, 33 U.S.C. §§ 1251-1388; Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801-1891d; Endangered Species Act, 16 U.S.C. §§ 1531-1544; National Environmental Policy Act, 42 U.S.C. §§ 4321-4370h.

State Laws: *See* note 9 *supra*.

is thus nonsensical and provides no basis for writing a new promise into the treaties.

Perhaps most importantly, it would be utterly contrary to the State's own interests to destroy salmon fisheries. Salmon are vital to Washington's people, culture, and economy. The State has voluntarily spent billions of dollars to preserve and restore salmon runs, and has updated its practices to best protect salmon as scientific understanding has changed. The State continues to spend vast sums to preserve and restore salmon entirely apart from the spending required under the injunction in this case. *See supra* pp. 10-13. There is simply no need to create a massive, ill-defined new treaty right.

5. The Ninth Circuit's Inferred Right is Unworkable

In declaring an implied "promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes," the Ninth Circuit created an unworkable standard. Pet. App. 94a. This rule makes it practically impossible to measure treaty compliance, and it exposes a whole range of activities to challenge under a highly indeterminate standard.

Neither the Ninth Circuit nor any Respondent has provided a workable definition of "a moderate living" from fishing. In discovery, the State asked the Tribes and the federal government to define the term. Both refused. JA 105a-06a, 117a-18a. They could not say how many fish or how much income would suffice, how the right would be measured, or even whether any signatory tribe had ever earned a "moderate living" from fishing. JA 105a-06a, 109a-10a, 117a-18a, 120a, 123a. Similarly, in

announcing this new right, the Ninth Circuit never explained whether the Treaties promised "a moderate living" by 1855 standards or by today's standards, whether the right was limited to the Indian population at treaty time or extended to today's much larger Indian population, or whether the right would fluctuate with salmon prices or other income Tribes earned.

This Court has consistently rejected such ill-defined standards. *See, e.g., Arizona v. California*, 373 U.S. 546, 600-01 (1963) (rejecting standard "measured by the Indians' 'reasonably foreseeable needs'" because "[h]ow many Indians there will be and what their future needs will be can only be guessed"). A nebulous rule is particularly problematic here because of the range of human activities that can affect salmon. As Judge O'Scannlain pointed out, "the panel's opinion could open the door to a whole host of future suits" seeking "to demand the removal of dams and attack a host of other practices that can degrade fish habitat (such as logging, grazing, and construction)." Pet. App. 28a-29a. JA 799a-806a. Such uncertainty as to what violates the treaties harms everyone. *See, e.g., Brendale v. Confederated Tribes & Bands of the Yakima Indian Nation*, 492 U.S. 408, 430 (1989) (plurality opinion) ("Uncertainty of this kind would not further the interests of either the Tribe or the . . . government and would be chaotic for landowners.").

The State is committed to respecting treaty fishing rights, and has dramatically improved its relationships with Washington tribes since this Court last interpreted these treaties *See, e.g., United States v. Washington*, 157 F.3d 630, 657 (9th Cir. 1998)

("This case has come a long way since the 1970's when a 'total lack of meaningful communication' led to 'deep distrust' between the parties."); Pet. App. 251a ("The parties have cooperated fully with one another throughout these proceedings . . . ."); *supra* pp. 11-13. But the State should not be paralyzed in its decision-making by a standard that is impossible to define, especially when that standard has no basis in the treaties' text, the parties understanding, or precedent. This Court should reject the Ninth Circuit's expansive new implied right and recognize that existing protections are more workable, more democratic, and more in line with federalism concerns and the proper role of courts.

B. The State Should Be Allowed to Raise Equitable Defenses Against the Federal Government

Early in this case, the State asserted several equitable defenses against the federal government. Had the State prevailed as to those defenses, the case would have ended, because the Tribes would have been unable to overcome the State's sovereign immunity without the United States. Pet. App. 35a ("[O]nly the United States could bring suit against Washington for alleged culvert violations because Washington is protected by sovereign immunity against suit from the Tribes." (citing *Idaho v. Coeur d'Alene Tribe of Idaho*, 521 U.S. 261, 268 (1997))). But the district court dismissed the State's equitable defenses at the pleading stage, Pet. App. 274a-75a, and the Ninth Circuit affirmed, Pet. App. 97a-99a. These rulings are contrary to this Court's decision in *City of Sherrill v. Oneida Indian Nation of New York*, 544 U.S. 197 (2005), and they rely on the mistaken

premise that equitable defenses abrogate treaty rights. This Court should reverse so that the State can pursue its powerful equitable defenses.

1. Powerful equities support the State given the federal role in designing and approving the culverts at issue

In this case, the federal government is suing the State of Washington for implementing a federal roadbuilding program to federal standards. The inequity is evident.

A century ago, the federal government began encouraging States to build highways, and it provided funding to do so if States built them to federal standards. *See supra* pp. 17-18. The federal government treated culverts as integral parts of highways and required that culverts be built to federal specifications. *See supra* pp. 18-19; JA 100a-02a, 119a; Lævin, 38 Neb. L. Rev. at 393-96. Virtually every highway culvert at issue in this case was built to specifications provided by the federal government. JA 78a, 101a, 375a. The federal government also provided permits for many of the culverts at issue under the Clean Water Act. JA 78a-79a.

At every step in this process—encouraging highway construction, providing culvert designs, and granting culvert permits—the federal government was supposed to ensure that its actions complied with its treaty obligations. *See, e.g., United States v. Payne*, 264 U.S. 446, 448 (1924) (United States must "discharge its trust with good faith and fairness"). But throughout the many decades in which the federal government undertook these actions, it never

informed the State that it might be breaching treaty obligations by building culverts in compliance with federal law. JA 101a, 375a. Indeed, when the State changed its culvert designs in the 1990s, it was on the State's own initiative. JA 101a, 375a. Until this case, the federal government never said a word against the State's culverts, even though it has been actively enforcing the treaty fishing right since the 1880s.

2. Equitable defenses limit remedies, not treaty rights

Despite these compelling equities in the State's favor, the Ninth Circuit held that the State was categorically barred from asserting equitable defenses. Its primary rationale was that only Congress can abrogate treaty rights, and "Congress has not abrogated the Stevens Treaties." Pet. App. 97a (citing *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 202 (1999)). This reasoning misunderstands the nature of equitable defenses.

An equitable defense to relief *does not* abrogate a treaty. Whether a substantive treaty right exists is distinct from what remedies may be available to vindicate it. *Sherrill*, 544 U.S. at 213 ("The distinction between a claim or substantive right and a remedy is fundamental." (quoting *Navajo Tribe of Indians v. New Mexico*, 809 F.2d 1455, 1467 (10th Cir. 1987))). Thus, even if a treaty right exists, equity may limit or bar relief. *Id.* In this way, equitable defenses are, by definition, less harsh than abrogation. *See Oneida Cty. v. Oneida Indian Nation of New York State*, 470 U.S. 226, 262 (1985) (Stevens, J., dissenting) (an "equitable defense to the instant claim is less harsh than a straightforward application of the limitations

rule"). That is why this Court and others have routinely applied equitable defenses to limit treaty-based relief, without pausing over the Ninth Circuit's fiction that such defenses abrogate treaties. *See, e.g.*, *Sherrill*, 544 U.S. 197; *Oneida Indian Nation of New York v. Cty. of Oneida*, 617 F.3d 114 (2d Cir. 2010); *Cayuga Indian Nation of New York v. Pataki*, 413 F.3d 266 (2d Cir. 2005).

3. This Court's precedent supports the availability of equitable defenses here

With the abrogation canard resolved, the only question becomes whether a defendant can ever raise equitable defenses against a treaty claim. This Court's precedent resolves the answer in the State's favor.

In *City of Sherrill v. Oneida Indian Nation of New York*, 544 U.S. 197 (2005), this Court explained that it is "well established" that equitable defenses can "bar long-dormant claims for equitable relief." *Id.* at 217; *see also Oneida Cty.*, 470 U.S. at 256 (Stevens, J., dissenting) (noting that this Court "has always applied the equitable doctrine of laches when Indians or others have sought, in equity, to set aside conveyances made under a statutory or common-law incapacity to convey"). There, a tribe purchased land within the boundaries of its historic reservation that had been held by non-Indians (and thus subject to state and local taxation) for many decades. This Court held that equitable doctrines defeated the tribe's attempt to enjoin the city from imposing property taxes on the newly reacquired land. *Sherrill*, 544 U.S. at 221. The Court relied on a number of circumstances, including the tribe's "long delay in

seeking equitable relief against New York or its local units," *id.* at 221, the "long history of state sovereign control over the territory," *id.* at 214, and the disruption that state and local government would face if the claim were allowed, *id.* at 217. The Court invoked these considerations even though the parties had not briefed equitable defenses, demonstrating the power of such defenses. *Id.* at 214 n.8.

Sherrill does not stand alone in demonstrating the availability of equitable defenses to treaty claims. *Sherrill* itself cited many cases applying equitable doctrines to tribal claims, *id.* at 215-19, and this Court has in other cases assumed that such defenses can limit relief, *see, e.g.*, *Nebraska v. Parker*, 136 S. Ct. 1072, 1082 (2016) (agreeing with intervenor United States that disputed lands were within tribe's reservation, but reserving "whether equitable considerations of laches and acquiescence may curtail the Tribe's power to tax [non-Indian businesses]").

This Court has also recognized in other contexts that federal action or inaction may limit later Indian claims. For example, in *Nevada v. United States*, 463 U.S. 110 (1983), the Court held that a tribe's claim for additional water under the *Winters* doctrine was barred by the federal government's failure to present the argument decades earlier in related litigation about the quantity of water reserved, even though the tribe itself had not been a party. *Id.* at 135. Similarly, in *Arizona v. California*, 460 U.S. 605 (1983), this Court held that a tribe could not relitigate the extent of its reserved water rights even where it alleged that the United States had inadequately represented its interests in prior

litigation and the tribe had not been a party. *Arizona*, 460 U.S.at 626-27 ("As a fiduciary, the United States had full authority to bring the *Winters* rights claims for the Indians and bind them in the litigation."). Surely, if the United States can limit a tribe's later claims for relief by failing to pursue a remedy in prior litigation, it can waive such relief by failing to bring litigation at all.

Despite this case law, Respondents contend that equitable defenses are categorically unavailable here, and the Ninth Circuit agreed. They claim that *Sherrill* is essentially limited to its facts, and that this case differs factually from *Sherrill*. These arguments fail.

Sherrill made clear that it was applying settled principles, not announcing a rule good for one case only. *See, e.g., Sherrill*, 544 U.S. at 214 (relying on "standards of federal Indian law and federal equity practice"); *id.* at 217 ("The principle that the passage of time can preclude relief has deep roots in our law[.]"). And the other cases cited above and in *Sherrill* confirm that the availability of equitable defenses extends beyond *Sherrill*'s precise facts. Thus, any factual distinctions from *Sherrill* go to whether the State's equitable defenses should prevail on the merits, not whether the State can raise them at all.

In any event, the factual distinctions between this case and *Sherrill* make equitable defenses even more compelling here. In *Sherrill*, the State had violated federal law for decades by purchasing land from the Oneida Tribe, *id.* at 204-05, whereas here the

federal government directed the State to build culverts as it did. While *Sherrill* involved administrative burdens in collecting taxes and zoning, this case involves the huge practical and financial burdens of tearing out existing road infrastructure the public uses every day. Perhaps most importantly, while *Sherrill* involved claims within the tribe's historic reservation lands, Respondents here seek to regulate land use outside of reservations, in areas where the Tribes "cede[d], relinquish[cd], and convey[ed] . . . all their right, title, and interest in and to the lands[.]" Medicine Creek Treaty, art. I, 10 Stat. at 1132; JA 786a. If anything, such claims threaten to be more disruptive than claims to reservation lands. And if equity can limit a treaty claim to reservation land itself, surely it can limit other types of claims.

Respondents have also argued that this case differs from *Sherrill* because the treaties here have been the subject of litigation for over a century. But the same was true in *Sherrill*, where litigation seeking compensation for the Tribe's land began in 1893. *Sherrill*, 544 U.S. at 207. And the history of litigation over these Treaties actually supports the availability of equitable defenses here. Since the 1880s, and throughout subsequent decades, the federal government has brought many cases to enforce the Stevens Treaties. Yet at the same time, the federal government was encouraging Washington's highway construction, directing the State's culvert design, and issuing permits for the culverts, saying that they

complied with federal law.[32] Given that the federal government spent decades suing to enforce the treaties while simultaneously providing the design and permits for the State's culverts, the State's reliance interests are clear. *Cf. Sherrill*, 544 U.S. at 217 ("It is well established that laches, a doctrine focused on one side's inaction and the other's legitimate reliance, may bar long-dormant claims for equitable relief.").

In short, if there are to be further proceedings in this case, the Court should allow the State to raise equitable defenses.

C. The Broad, Systemwide Injunction Here Ignores this Court's Legal Rules Limiting Injunctive Relief

Even if this Court finds that the Ninth Circuit properly interpreted the treaties and dismissed the State's equitable defenses, it should vacate the injunction here. Injunctions are supposed to be extraordinary remedies tailored to redress only violations of federal law. *E.g., Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 165 (2010); *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 24 (2008). When the defendant is a State, "appropriate consideration must be given to principles of federalism," *Rizzo v. Goode*, 423 U.S. 362, 379 (1976),

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[32] The federal government was also building dams in areas covered by the Stevens Treaties that completely or partially blocked salmon runs. *See, e.g., Wild Fish Conservancy v. Salazar*, 628 F.3d 513, 516-17 (9th Cir. 2010); *Idaho ex rel. Evans v. Oregon*, 462 U.S. 1017, 1020-21 & nn.2-5 (1983).

especially where "a federal court decree has the effect of dictating state or local budget priorities," *Horne v. Flores*, 557 U.S. 433, 448 (2009). The injunction here violates these principles in several ways.

1. The injunction requires the State to replace culverts that will have no impact

The injunction forces the State to replace culverts where doing so will make no difference to salmon. It requires the State, by 2030, to replace any state-owned highway barrier culvert that has "200 lineal meters or more of salmon habitat upstream from the culvert to the first *natural* passage barrier." Pet. App. 237a (emphasis added), *see id.* at 104a. Thus, the State must replace its culverts even if other man-made barriers upstream or downstream prevent salmon from reaching the state culvert or a traditional tribal fishing place. As Judge O'Scannlain explained, "the injunction requires [Washington] to replace or repair all 817 culverts located in the area covered by the Treaties without regard to whether replacement of a particular culvert actually will increase the available salmon habitat." Pet. App. 37a.

This flaw permeates the systemwide injunction. Roughly 90% of state barrier culverts subject to the order are upstream or downstream of other non-State barriers. *See* JA 327a-28a, 348a-51a. In many watersheds, non-state barrier culverts drastically exceed state-owned barrier culverts, by up to 36 to 1. *See* JA 285a, 397a, 439a, 444a-45a; ER 196-211, 407-555; Pet. App. 203a. Thus, a significant portion of the culverts that the injunction requires the State to replace will have no impact.

Injunctive relief is supposed to address violations of federal law, yet the lower courts never explained how a State culvert could possibly violate the treaties if no salmon can reach it. Respondents have argued previously that the State's own "Priority Index" formula does not consider the presence of other man-made barriers in a stream, so the lower courts simply followed the State's methodology. US BIO 24. But this contradicts the record which shows that the Priority Index does not dictate the order in which the State replaces culverts. Pet. App. 145a (Finding 3.78), 169a (Findings 44-47); JA 328a-29a, 384a-85a. Rather, the State focuses its efforts on culverts in streams without other barriers. JA 328a-30a, 384a; *see* Pet. App. 169a (Finding 46). And even if the State did choose, as a policy matter, to replace its culverts regardless of other barriers, that choice would not convert such culverts into treaty violations that a federal court could order replaced. "'[F]ederal-court decrees exceed appropriate limits if they are aimed at eliminating a condition that does not violate [federal law] or does not flow from such a violation.'" *Horne*, 557 U.S. at 450 (first alteration ours) (quoting *Milliken v. Bradley*, 433 U.S. 267, 282 (1977)).

2. The injunction requires the State to waste precious funds that could be better spent on other salmon-recovery efforts

An injunction requiring expenditures that correct no violation of federal law would be problematic as to any defendant, but is especially problematic where the defendant is a State. *See Rizzo*, 423 U.S. at 379; *Horne*, 557 U.S. at 448. Here,

the problem is even worse because the injunction requires massive State expenditures that will come in part at the expense of more effective salmon recovery programs.

The injunction here will force the State to spend vast sums replacing culverts. It requires the State to replace culverts with bridges or "stream simulation" culverts (the most expensive options), Pet. App. 239a, even though less-costly designs comply with the Endangered Species Act, Pet. App. 139a, 168a. Operating under the injunction, in 2016 the State's average cost for replacing a highway culvert was $2.3 million, *see supra* pp. 20-21, and the cost has been increasing every year for a variety of reasons. JA 388a-389a. The State currently projects that complying with the injunction will cost over $2 billion by 2030.[33]

While those numbers alone are troubling, even worse is that much of the money will be wasted on projects that open no new habitat to salmon because of other barriers, as detailed above. Explaining to state taxpayers why they must pay to replace a culvert when a federal, private, or tribal culvert prevents any fish from reaching it is no easy task. This is especially so because the State currently spends money on a variety of other salmon recovery

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[33] *See* WSDOT presentation to Joint Transportation Committee, Sept. 14, 2017, http://leg.wa.gov/JTC/Meetings/Documents/Agendas/2017%20Agendas/Sept%202017%20Meeting/WSDOT_Culverts.pdf.

efforts (such as stormwater management projects) whose budgets will undoubtedly suffer if the State's finite budget suddenly has to absorb vastly increased spending on culverts. *See* Pet. App. 152a; JA 279a-83a, 358a-59a, 378a; *cf. Horne*, 557 U.S. at 448 ("When a federal court orders that money be appropriated for one program, the effect is often to take funds away from other important programs."). There is no basis in this Court's precedent for ordering such wasteful reallocation of State funds.

3. The injunction requires the State to replace culverts even where there is no evidence that the culvert has impacted tribal harvests

The lower courts ordered the State to replace its culverts throughout western Washington without evidence that any particular culvert or group of culverts has reduced the number of fish that would otherwise reach tribal fishing areas. This was a "patently inadequate basis for a conclusion of systemwide violation and imposition of systemwide relief." *Lewis v. Casey*, 518 U.S. 343, 359 (1996).

Plaintiffs presented no persuasive evidence of a relationship between the number of state highway culverts and salmon harvests. Washington salmon runs first declined dramatically in the late 1800s (because of overfishing), long before the State began building highways or culverts. Pet. App. 70a; JA 132a-33a. Washington's state highway system has been essentially the same size since the 1960s,

JA 179a-80a, 398a, but salmon harvests in western Washington have fluctuated enormously since then, reaching a high of nearly 11 million fish in 1985, dropping to a low of under 900,000 fish by 1999, and then rebounding to over 4 million fish by 2003. *See* JA 204a-05a, 211a, 247a.

Despite this lack of a clear connection between culverts and tribal harvests, the Ninth Circuit concluded that "hundreds of thousands of adult salmon will be produced by" replacing "the State's barrier culverts." Pet. App. 115a. It based this claim primarily on a 1997 report to the Washington Legislature. Pet. App. 108a-09a; JA 426a-30a. But the district court—the factfinder—rejected use of that report to predict "lost" salmon as unreliable and never cited it in its findings of fact. Pet. App. 245a-47a, 130a-73a.[34] The district court noted that in suggesting how many salmon could be produced by removing barrier culverts, the report ignored all other factors, "such as the presence of other, non-[state] culverts, other habitat modifications, and many other environmental factors." Pet. App. 247a. Thus, the Ninth Circuit relied on exactly the sort of conjecture that is insufficient to support "a conclusion of systemwide violation and imposition of systemwide relief." *Lewis*, 518 U.S. at 359.

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[34] In opposing certiorari, the Tribes claimed that the district court cited this report in Finding of Fact 3.89, Pet. App. 147a. Tribal BIO 32. This is incorrect. The 1997 report cited in FF 3.89 was a different report by the Fish Passage Task Force, not the report misused by the Ninth Circuit panel. *See* JA 314a; SER006.1-006.3.

Respondents may claim that it would have been too difficult to prove the effect of state culverts on specific salmon runs. But the State itself has done the work of identifying its barrier culverts. And Respondents did present evidence about a few specific culverts, it just wasn't very compelling because the State had already replaced nearly all of them. *Compare* JA 189a, 534a-37a, 679a-83a (identifying barrier culvert on Red Cabin Creek) *with* Pet. App. 225a, 231a, JA 228a-29a (showing that this culvert was replaced by a bridge in 2011). Respondents' inability to prove the effect of culverts in any measurable way is a failure of proof, not a reason to abandon normal limits on injunctive relief. Moreover, when this Court held forty years ago that the tribes were entitled to a "fair share" of the available salmon, it made clear that this right is "calculated on a river-by-river, run-by-run basis." *Fishing Vessel*, 443 U.S. at 671. If there is a treaty right to habitat restoration to achieve a moderate living from salmon, there is no reason it should be measured in a different way.

4. The injunction ignores the equities, forcing the State to shoulder the entire burden of fixing problems created largely by the federal government

Finally, the injunction ignores the stark inequity of the federal government using a treaty it signed to force the State (a nonparty) to bear the entire cost of replacing culverts that the federal government designed and permitted.

"[W]hen a district court" considers a request for injunction, its "function is 'to do equity and to mould each decree to the necessities of the particular case.'" *Monsanto Co.*, 561 U.S. at 174-75 (quoting *Hecht Co. v. Bowles*, 321 U.S. 321, 329 (1944)). That imperative should have carried extra weight here given that the defendant is a State. *Rizzo*, 423 U.S. at 379. And there are strong equities on the State's side, including: (1) the federal role in designing and permitting these culverts, (2) other federal actions (such as building dams) that drastically reduced the number of salmon the Tribes could harvest, (3) the State's efforts to address (before any federal intervention) the potential problems federal culvert designs could pose for salmon, and (4) that the State has for decades voluntarily "spent millions of dollars on programs specifically designed to preserve, to protect, and to enhance the salmon population." Pet. App. 28a n.8. An equitable injunction would have considered these factors in establishing the State's responsibilities; the injunction here ignores them.

In sum, if the Court does not reverse on other grounds, it should at least vacate the injunction. If any injunction is required, the Court should direct that it be: (1) tailored to address only culverts that can have an impact, (2) based on evidence that replacing a specific culvert or set of culverts will actually return a meaningful number of salmon to a tribal fishing area, (3) crafted in light of the State's limited resources and to avoid wasting public funds, and (4) cognizant of the equities.

CONCLUSION

The judgment of the Ninth Circuit should be reversed.

RESPECTFULLY SUBMITTED.

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No. 17-269

In the Supreme Court of the United States

STATE OF WASHINGTON, PETITIONER

v.

UNITED STATES OF AMERICA, ET AL.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

BRIEF FOR THE UNITED STATES

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QUESTIONS PRESENTED

1. Whether the "right of taking fish, at all usual and accustomed grounds and stations * * * in common with all citizens," reserved by respondent Indian Tribes in the Stevens Treaties, *e.g.*, Treaty of Medicine Creek, U.S.-Nisqually, art. III, Dec. 26, 1854, 10 Stat. 1133, imposes a duty on the State of Washington to refrain from building or maintaining culverts that directly block passage of a large number of anadromous fish to and from those grounds and that significantly diminish fish populations available for tribal harvest so that the Tribes cannot sustain a livelihood from their fisheries.

2. Whether the court of appeals correctly declined to apply the doctrines of waiver or laches to bar this suit, which addresses a treaty reserving rights and resources that pre-date the State, the scope of which has been in dispute for more than 100 years.

3. Whether the court of appeals correctly held that the district court did not abuse its discretion in enjoining the State to provide fish passage by addressing barrier culverts on a reasonable schedule necessary to ensure that the State acts expeditiously to remedy a violation of tribal treaty rights.

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BRIEF FOR THE UNITED STATES

OPINIONS BELOW

The amended order and opinion of the court of appeals (Pet. App. 58a-126a) are reported at 853 F.3d 946. Relevant opinions of the district court are reported at 20 F. Supp. 3d 986 (Pet. App. 127a-179a, 235a-242a), 20 F. Supp. 3d 828 (Pet. App. 249a-272a), and 19 F. Supp. 3d 1317 (Pet. App. 273a-282a).

JURISDICTION

The judgment of the court of appeals was entered on March 2, 2017. A petition for rehearing was denied on May 19, 2017 (Pet. App. 1a-57a). The petition for a writ of certiorari was filed on August 17, 2017. The petition was granted on January 12, 2018. The jurisdiction of this Court rests on 28 U.S.C. 1254(1).

STATEMENT

In 1804, Meriwether Lewis and William Clark set out to explore and map territory newly acquired by the United States in the Louisiana Purchase. As they traveled the last leg of their journey to the Pacific Ocean, they found the rivers "remarkably clear and crouded with salmon." 3 *Original Journals of the Lewis and Clark Expedition* 122 (Reuben Gold Thwaites ed. 1959). For the Indians they met there, these fish were "not much less necessary to the existence of the Indians than the atmosphere they breathed." *United States* v. *Winans*, 198 U.S. 371, 381 (1905).

1. From time immemorial, fishing has been central to the cultural, economic, and religious identity of the Indian tribes of western Washington. Each tribe "shared a vital and unifying dependence on anadromous fish," such as salmon, which "hatch in fresh water, migrate to the ocean where they are reared and reach mature size, and eventually complete their life cycle by returning to the fresh-water place of their origin to spawn." *Washington* v. *Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 662, 664 (1979) (*Fishing Vessel*). In addition to dictating the "movements of the largely nomadic tribes," and serving as "the great staple of their diet and livelihood," *id.* at 665 & n.6 (citation omitted), the fish also played an integral role in tribal religious life. "Indian religious ceremonies celebrated the first salmon of the run to encourage other fish to follow," J.A. 141a, and the tribes passed down stories designed to promote reverence for the fish and responsible stewardship of their fisheries. See J.A. 143a (Quinault legend warning of retribution for "greedy downstream" fishers); *ibid.* (Skokomish legend that overuse of fishing weirs would cause "the

salmon themselves [to] take offense"); see also J.A. 141a-144a.

In 1854 and 1855, under instructions from the Commissioner of Indian Affairs, Governor Isaac Stevens of the Washington Territory negotiated a series of treaties, known as the Stevens Treaties, with the tribes residing in what is now the western part of the State of Washington. J.A. 125a. In exchange for vast cessions of their territory, each tribe was promised a small reservation of land to serve as a permanent home, as well as the right to periodic monetary payments.

These treaties also guaranteed to each tribe a "right of taking fish." *Fishing Vessel*, 443 U.S. at 661-662 (citation omitted). Governor Stevens was well aware of "the vital importance of the fisheries" to the tribes. *Id.* at 666. He understood, too, that the tribes would not agree to give up their territory without a guarantee of their fishing rights as against "non-Indian settlers [who] might seek to monopolize their fisheries." *Ibid.* To that end, each of the Stevens Treaties contained a nearly identical reservation of rights:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory.

Treaty of Medicine Creek, U.S.-Nisqually, art. III, Dec. 26, 1854, 10 Stat. 1133; see Pet. App. 68a.

2. For many years following the Stevens Treaties, the "Indians continued to harvest most of the fish taken from the waters of Washington." *Fishing Vessel*, 443 U.S. at 668. By the end of the nineteenth century, however, "non-Indians began to dominate the fisheries and eventually to exclude most Indians." *Id.* at 669. Washington enacted "discriminatory state regula-

tion[s]" designed to limit the tribes' access to their traditional fisheries, and increasing numbers of private and commercial fishing operations adopted "illegal exclusionary tactics." *Id.* at 669 & n.14. As the availability of salmon and other anadromous fish diminished, disputes over fishing rights proliferated between Washington and the tribes, which increasingly turned to the federal judiciary to protect their treaty rights. See, *e.g.*, *Tulee* v. *Washington*, 315 U.S. 681 (1942); *Seufert Bros. Co.* v. *United States*, 249 U.S. 194 (1919); *Winans*, *supra*; see also *Fishing Vessel*, 443 U.S. at 669-670.

a. The State's efforts to prevent fishing by Indians at their traditional fisheries escalated in the 1960s, leading to widespread arrests and, in some cases, violence. Pet. App. 76a-77a. In 1970, the United States, on its own behalf and as trustee for several of the tribes, sued Washington in federal district court, seeking "an interpretation of the treaties and an injunction requiring the State to protect the Indians' share of the anadromous fish runs." *Fishing Vessel*, 443 U.S. at 669-670. Tribal plaintiffs joined the United States in the suit. The court bifurcated the proceedings. Pet. App. 78a.

In Phase I, the district court established the locations of the tribes' "usual and accustomed" fishing grounds and held that the tribes could take up to 50% of the harvestable fish from those grounds. *United States* v. *Washington*, 384 F. Supp. 312, 332-333, 343-344 (W.D. Wash. 1974), aff'd, 520 F.2d 676 (9th Cir. 1975), cert. denied, 423 U.S. 1086 (1976). The court issued an injunction forbidding contrary state regulation, *id.* at 413-420, and it retained jurisdiction to address, in Phase II of the litigation, other unresolved issues arising out of the treaties, *id.* at 418-419.

The district court's ruling met substantial resistance from the State, and the Washington Supreme Court ruled that state agencies "could not comply with the federal injunction." *Fishing Vessel*, 443 U.S. at 672; see *id.* at 673 (Washington's "Fisheries [agency] was ordered by the state courts to abandon its attempt" to honor the injunction, and "the Game Department simply refused to comply"). This "widespread defiance of the District Court's orders" spawned additional litigation, which ultimately reached this Court in *Fishing Vessel*. *Id.* at 674.

There, the Court addressed the question whether the Stevens Treaties guaranteed the tribes only a right of "access to fishing sites 'in common with'" non-Indians (as Washington argued), or instead gave them "a right to harvest a share of the runs of anadromous fish," both on their reservations and at their traditional fisheries (as the United States and the tribes argued). 443 U.S. at 675. Based on "a fair appraisal of the purpose of the treaty negotiations, the language of the treaties, and this Court's prior construction of the treaties," the Court concluded that the latter interpretation was correct. *Ibid.*; see *id.* at 675-685. The Court explained that, "[b]ecause the Indians had always exercised the right to meet their subsistence and commercial needs by taking fish from treaty area waters, they would be unlikely to perceive a 'reservation' of that right as merely the chance, shared with millions of other citizens, occasionally to dip their nets into the territorial waters." *Id.* at 678-679.

Next, the Court addressed the appropriate "equitable measure" for determining the tribes' share of the fish harvest. *Fishing Vessel*, 443 U.S. at 685. Based on the Court's "earlier decisions concerning Indian treaty rights to scarce natural resources," such as water, and

in light of apportionment standards rooted in the "Anglo-American common law," the Court determined that the tribes should be permitted to take up to a 50% share. *Id.* at 685-686 & n.27. But the Court emphasized that the 50% figure was a "maximum possible allocation," and that the actual amount should be "so much as, but no more than, is necessary to provide the Indians with a livelihood—that is to say, a moderate living." *Id.* at 686. Thus, should a tribe "dwindle to just a few members," or "find other sources of support that lead it to abandon its fisheries," then a lesser allocation might suffice. *Id.* at 687.

b. In 1976, the United States initiated Phase II of the litigation, seeking a determination, *inter alia*, that the Stevens Treaties guaranteed to the tribes "a right to have the[ir] fishery resource protected from adverse environmental actions or inactions of the State of Washington." J.A. 803a. The United States alleged that anadromous fish populations passing through the tribes' fisheries had been "substantially altered" by the activities of the State, J.A. 800a, including as a result of "[t]he improper placement of culverts," J.A. 806a. See J.A. 802a ("[M]igration routes have been restricted or blocked."); J.A. 806a ("[I]mproper culvert placement, size, or gradient will prevent the upstream migration of salmon and steelhead."). The district court ruled in favor of the United States, concluding that the right of the tribes under the treaties imposed on Washington a correlative duty "to refrain from degrading the fish habitat to an extent that would deprive the tribes of their moderate living needs." *United States* v. *Washington*, 506 F. Supp. 187, 208 (W.D. Wash. 1980). The decision did not address the degradation of any particular habitat, however, nor did it specify any concrete remedy. See *ibid.*

The court of appeals vacated in relevant part. *United States* v. *Washington*, 759 F.2d 1353 (9th Cir.) (en banc) (per curiam), cert. denied, 474 U.S. 994 (1985). The court did not dispute that Washington was obligated under the treaties to refrain from actions that substantially degrade the tribes' fisheries. But it concluded that the district court, in granting relief against environmental degradation generally, had not sufficiently distinguished among "the myriad State actions that may affect the environment of the treaty area." *Id.* at 1357. The court of appeals determined that any further application of the tribes' treaty rights would have to await a future proceeding, in which the appropriate principles and remedies "w[ould] depend for their definition and articulation upon concrete facts which underlie a dispute in a particular case." *Ibid.*

3. Washington maintains a statewide network of roads, many of which cross rivers and streams that salmon and other anadromous fish use to migrate between freshwater spawning grounds and the ocean. Culverts allow water to flow underneath the roads, "but many culverts do not allow fish to pass easily," and some "do not allow fish passage at all." Pet. App. 77a. So-called "barrier culverts" inhibit or prevent the natural migration of fish. *Ibid.*; see *id.* at 159a. A 1997 report by two state agencies, the Washington Department of Fish & Wildlife (WDFW) and the Washington State Department of Transportation (WSDOT), identified the use of barrier culverts as "one of the most recurrent and correctable obstacles to healthy salmonid stocks in Washington." J.A. 426a-427a. The report determined that culverts installed by WSDOT were, at the time of the report, blocking a "total potential spawning and rearing area" of more than 1.6 million square meters.

J.A. 430a; see Pet. App. 109a. Calling for the "identification and correction" of barrier culverts statewide, the report estimated that, at current funding levels, "it would take over 100 years to reach complete barrier resolution." J.A. 435a-436a.

a. In 2001, respondent Tribes filed a request for determination (similar to a complaint) in the Phase II proceeding, seeking declaratory and injunctive relief against Washington. J.A. 41a-58a. The Tribes requested an order requiring the State "to refrain from constructing and maintaining culverts under State roads that degrade fish habitat so that adult fish production is reduced." J.A. 41a. The United States joined the proceeding, in its capacity as trustee for the Tribes, and sought an injunction calling on the State to identify and—within five years or another "necessary and just" period of time—replace state-maintained culverts that "degrade appreciably [the] passage of fish that otherwise would pass through usual and accustomed fishing grounds and stations so as to deprive the Tribes of the ability to earn a moderate living from the fishery." J.A. 63a.

In response, the State sought a declaration "that there is no treaty-based right or duty of fish habitat protection." J.A. 89a-90a. Washington also asserted various defenses, including waiver and estoppel. J.A. 86a-89a. Washington alleged that some of its barrier culverts had been built under highways funded in part by the United States, and that such culverts were "designed according to standards set or approved by the Federal Highway Administration" (FHWA), leading the State to believe "that by approving or failing to object to the State's culvert design and maintenance, the

FHWA had determined that the design and maintenance satisfied any treaty obligation." J.A. 78a.

b. The district court rejected the State's defenses, including waiver and estoppel. Pet. App. 273a-282a. The court determined that, under "binding authority" of this Court, the "acts of government agent[s]" cannot "constitute waiver of Indian rights" or estop the government so as to "defeat claims enforcing Indian rights." *Id.* at 274a.

On summary judgment, the district court ruled in favor of the Tribes and the United States on the issue of treaty rights. Pet. App. 249a-272a. Based on the text and negotiating history of the Stevens Treaties, the court concluded that the treaties promised the Tribes, which gave up nearly all of their land while securing protection for their right to take fish, "that neither the negotiators nor their successors would take actions that would significantly degrade the resource." *Id.* at 270a. The court further determined that "the building of stream-blocking culverts" may qualify as just such a "resource-degrading activit[y]." *Ibid.* The court explained, however, that the State's obligation to avoid substantially degrading the fish stocks passing through tribal fisheries "is not a broad 'environmental servitude' or the imposition of an affirmative duty to take all possible steps to protect fish runs," but instead is "a narrow directive to refrain from impeding fish runs in one specific manner." *Id.* at 271a.

c. In 2009 and 2010, the district court held a bench trial, limited by agreement of the parties to the effect of "culverts that block fish passage under State-owned roads." Pet. App. 173a; see *id.* at 128a. Based on extensive evidence, much of it uncontroverted, the court de-

termined that the State had violated "a narrow and specific treaty-based duty" to refrain from building or maintaining barrier culverts. *Id.* at 178a; see *id.* at 127a-179a.

First, the district court found that "habitat degradation" was a "primary cause" of the steep decline in fish stocks passing through tribal fisheries. Pet. App. 174a. In particular, the court found that barrier culverts installed and maintained by the State "are directly responsible for a demonstrable portion of the diminishment of the salmon runs." *Id.* at 175a. The court determined that improperly designed culverts have blocked the passage of fish, resulting in the loss of spawning and rearing habitats. *Id.* at 160a-161a; see *id.* at 160a ("[B]arrier culverts have a negative impact on spawning success, growth and survival of young salmon, upstream and downstream migration, and overall production."). One analysis of coho salmon in Skagit River tributaries, for instance, indicated that up to "58% of the loss of salmon production was attributable to barrier culverts." *Id.* at 161a.

The district court next found that "State action in the form of acceleration of barrier correction is necessary to remedy this decline in salmon stocks and remove the threats which face the Tribes." Pet. App. 177a. Action to remediate barrier culverts is the "highest priority for restoring salmon habitat," the court determined, due to the direct relationship between quality of habitat and salmon production. *Id.* at 157a. The court also found culvert remediation to be a "cost-effective and scientifically sound method" for restoring salmon habitat, "provid[ing] immediate benefit in terms of salmon production." *Id.* at 166a. Based on records from WDFW, the court determined that, at the time of trial, state-

owned culverts blocked access to about 1000 miles of streams, constituting nearly five million square meters of habitat. See *id.* at 156a-157a, 162a. But at the rate the State was addressing those barriers—eight per year between 2009 and 2011—"it would take the State more than 100 years to replace the 'significantly blocking' WSDOT barrier culverts that existed in 2009." *Id.* at 163a. The court further found that the number of known barrier culverts had in fact *increased* since 2009, as new barrier culverts were being built faster than existing ones were being corrected, *id.* at 163a-164a, indicating that "under the current State approach, the problem of WSDOT barrier culverts in the Case Area will never be solved," *id.* at 164a.

Finally, the district court determined that "[t]he balance of hardships tips steeply toward the Tribes in this matter." Pet. App. 177a. "The promise made to the Tribes that the Stevens Treaties would protect their source of food and commerce," the court explained, was "crucial in obtaining their assent." *Ibid.* Absent injunctive relief, it concluded, the Tribes will continue to sustain damage "not only economically but in their traditions, culture, and religion[,] interests for which there is no adequate monetary relief." *Ibid.* The court further found that the public interest would be served by "accelerat[ing] the pace of barrier correction," because "[a]ll fishermen, not just Tribal fishermen, will benefit from the increased production of salmon," and because "[t]he general public will benefit from the enhancement of the resource and the increased economic return from fishing." *Id.* at 177a-178a. The court accordingly found it appropriate to grant a permanent injunction "narrowly tailored to remedy [the] specific harms" alleged. *Id.* at 179a.

d. Following trial, the district court invited the parties to submit briefing on the proper scope of injunctive relief. Pet. App. 235a. The State declined to participate, however, "on the ground that it had not violated the Treaties and that, therefore, no remedy was appropriate." *Id.* at 107a.

The district court issued a permanent injunction requiring the State and its agencies to accelerate the pace of culvert remediation. Pet. App. 235a-242a. The injunction orders the State to prepare a list, using methodologies devised and adopted by WDFW, of barrier culverts under state-owned roads. *Id.* at 236a-237a. Culverts maintained by state agencies other than WSDOT were to be corrected by October 2016, the date by which those agencies were already expected under state law to correct such culverts. *Id.* at 237a; see *id.* at 148a-150a. With respect to barrier culverts maintained by WSDOT, the injunction orders remediation within 17 years of culverts with "200 lineal meters or more of salmon habitat upstream to the first natural passage barrier." *Id.* at 237a. For other, less-obstructive culverts, the injunction requires correction only "at the end of the culvert's useful life," or in connection with another highway project. *Id.* at 237a-238a. The injunction also grants the State permission to "defer correction" of WSDOT culverts that block up to 10% of total upstream habitat, subjecting those culverts to the more lenient end-of-useful-life schedule. *Id.* at 238a. Finally, the injunction allows the State to deviate from required design standards if it can establish, or the parties agree, that the standards are not feasible in light of particular "site conditions." *Id.* at 239a.

4. The State appealed but did not seek a stay of the injunction. As of February 2017, state agencies other

than WSDOT reported that they had largely completed correction of culverts subject to the injunction.[1]

a. The court of appeals affirmed. Pet. App. 58a-126a. At the outset, the court rejected the State's argument that it "has no treaty-based duty to refrain from building and maintaining barrier culverts" and even "has the right, consistent with the Treaties, to block every salmon-bearing stream feeding into Puget Sound." *Id.* at 86a-87a; see *id.* at 88a (State's attorney at oral argument stating "Your honor, the treaties would not prohibit that."). The court explained that "[t]he Indians did not understand the Treaties to promise that they would have access to their usual and accustomed fishing places, but with a qualification that would allow the government to diminish or destroy the fish runs." *Id.* at 91a; see *id.* at 91a-92a ("Governor Stevens did not make * * * such a cynical and disingenuous promise."). Examining the treaties' negotiating history, as well as this Court's interpretation of treaty-based fishing rights, the court held that the treaties prevent the State from rendering the Tribes' fishing rights "worthless" by constructing and maintaining culverts that block passage of anadromous fish to and from traditional tribal fishing grounds. *Id.* at 94a; see *id.* at 92a-94a.

Next, the court of appeals affirmed the rejection of Washington's equitable defenses. Pet. App. 96a-99a. Under longstanding precedents, the court explained, when the United States sues as a trustee for Indian tribes, it is not subject to laches, waiver, or estoppel based on the actions of government agents who purportedly have approved treaty violations. *Id.* at 97a-98a.

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[1] See Results Washington, *Fish Passage Barriers* (Feb. 13, 2017), https://data.results.wa.gov/reports/G3-2-2-c-Supplemental-Fish-Passage.

The court also declined to accept Washington's argument that those precedents had been "called in doubt" by *City of Sherrill* v. *Oneida Indian Nation of New York*, 544 U.S. 197 (2005). Pet. App. 98a (citation omitted). In *City of Sherrill*, the Court rejected a tribe's attempt to invoke immunity from taxation for recently purchased land over which the tribe had not exerted sovereignty for 200 years. The circumstances of this case, the court of appeals explained, are "radically different from *Sherrill*," including because the Tribes have done nothing "to relinquish their rights under the Treaties"; they "have done nothing to authorize the State to construct and maintain barrier culverts"; and "Washington and the Tribes have been in a more or less continuous state of conflict over treaty-based fishing rights for over one hundred years." *Id.* at 99a.

Finally, the court of appeals rejected the State's arguments regarding the scope of injunctive relief. Pet. App. 104a-126a. The court concluded that "extensive evidence" supported the district court's finding that state-owned barrier culverts have a "significant adverse effect on salmon." *Id.* at 108a; see *id.* at 108a-109a. The State argued that correcting those state-owned culverts would not have a substantial impact "because of the presence of non-state-owned barrier culverts on the same streams." *Id.* at 110a. But the court rejected that argument for several reasons: First, the district court, in choosing to focus on state-owned culverts, "followed the practice of the state itself," *ibid.*; second, "almost ninety percent" of non-state barriers are upstream of state-maintained barriers, and more than two-thirds of downstream non-state barriers "allowed partial passage of fish," *id.* at 111a; and third, testimony and research on past culvert-removal projects showed that the

injunction would in fact provide an "immediate benefit" in a "cost effective" manner, *id.* at 113a. See *id.* at 108a-116a. The court also concluded the injunction was appropriate and consistent with equitable principles. *Id.* at 120a-125a.

b. The court of appeals denied rehearing en banc. Judge Fletcher, joined by Judge Gould, concurred in the denial, Pet. App. 6a-17a, and Judge O'Scannlain, joined at least in part by eight other judges, dissented, *id.* at 17a-41a.

SUMMARY OF ARGUMENT

The courts below properly concluded that the Stevens Treaties prohibit the State from imposing obstructions that substantially degrade or destroy the Tribes' traditional fisheries.

A. Since time immemorial, the Tribes have depended on their salmon fisheries, an annually renewable resource that they protected from obstructions. The Stevens Treaties, by "secur[ing]" to the Tribes the "the right of taking fish, at all usual and accustomed grounds and stations," assured the Tribes lasting federal protection for their preexisting right as they understood it. The Tribes relied on that protection when agreeing to cede almost all of their territory in return for small land reservations and fishing rights. And Governor Stevens viewed protecting tribal fisheries as key to his own goals of minimizing costs and avoiding subsidies for the Tribes. Neither party would have understood the treaties as protecting the Tribes' access to their traditional fisheries, yet permitting obstructions that substantially degraded those same fisheries.

Contemporaneous sources of law similarly protected fisheries against obstructions. The law of the Oregon Territory, later adopted for the Washington Territory,

prohibited obstructing rivers and streams. And under the common law, owners of land adjacent to streams through which migratory fish swam could not inhibit fish passage.

This Court's cases have also consistently interpreted the Stevens Treaties as protecting fish stocks against man-made causes of degradation. Neither the State nor the Tribes have been permitted to frustrate the treaties' goals by undermining the shared resource. That approach is consistent as well with this Court's decisions concerning reserved water rights, which have protected water access when necessary to the functioning of a reservation. The tribal salmon fisheries at issue here have historically been just as necessary to the Tribes.

The State's characterization of the rulings below as guaranteeing the Tribes "a permanent standard of living from fishing" (Br. 32) is inaccurate, as the district court explained, Pet. App. 280a. The relief requested by the United States and the Tribes, granted by the district court, and affirmed on appeal was limited to protection against affirmative actions of the State that substantially degraded tribal fisheries. The State's current litigating position—that courts may grant relief against those whose conduct might "destroy the fisheries" (Br. 41)—is largely consistent with that conclusion.

B. The State argues that relief is precluded here by the State's (unspecified) "equitable defenses," because it built many of the barrier culverts that block the Tribes' fisheries in reliance on federal funds and specifications. The State relied below on "waiver and/or estoppel," J.A. 86a-87a, but waiver is not an equitable defense, and the State abandoned its estoppel argument on appeal. In any event, the actions or inactions of government officials cannot preclude the United States

from seeking relief on behalf of Indians for violations of federal law.

Contrary to the State's argument, its equitable defenses are not supported by *City of Sherrill* v. *Oneida Indian Nation of New York*, 544 U.S. 197 (2005), where this Court rejected a tribe's unilateral attempt to resurrect its inherent sovereignty that had lain dormant for 200 years. The United States was not a party in *City of Sherrill*, as it is here. Unlike the tribe in *City of Sherrill*, moreover, the Tribes have not slept on their rights. And they have appropriately sought relief in a judicial proceeding, alongside the United States, rather than attempting to act unilaterally, as in *City of Sherrill*.

The State's equitable defenses are also without merit. The FHWA provides all States with general guidelines for building culverts and funding for highways. But no federal statute or regulation *required* the State to use a particular model or prevented the State from making adjustments to take account of local conditions. Indeed, the State recently adjusted its culvert construction to facilitate fish passage.

C. The injunction in this case properly requires the State to accelerate its existing efforts to remove obstructions that substantially degrade or destroy tribal fisheries.

First, the record shows that replacing the State's barrier culverts will have a significant positive impact. The injunction requires replacement of barriers with 200 meters or more upstream to the first "natural passage barrier." Pet. App. 237a. The State argues that removing state-owned barriers will have no effect if other man-made barriers block the same stream. But non-state barriers tend to be clustered upstream—often far upstream—from the State's barriers, and

many non-state barriers allow partial fish passage. The injunction also gives the State flexibility to account for other obstructions when choosing which barriers to remediate and which to defer for correction. And there is no reason to assume that non-state barriers, which are illegal under state law, will always block streams; indeed, the record shows the opposite.

Second, "extensive evidence, much of it from the State itself," Pet. App. 115a, shows that the State's barrier culverts have substantially affected salmon harvests. State agency reports, expert testimony, and field studies all point to the same conclusion.

Third, the State's assertion that its money would be better spent on other (unspecified) salmon-recovery efforts is untimely, given the State's refusal in the district court to propose alternative relief. The State's assertion is also contradicted by record evidence showing that replacing barrier culverts is highly cost-effective and fast-working. The State offers no record support for its estimate, which the district court rejected, that replacement will cost $2.3 million per culvert, nor for its projection that complying with the injunction will cost more than $2 billion. Among other things, that figure misconstrues the injunction as requiring correction of *every* state-owned culvert, and it attributes *all* of the State's remediation costs to the injunction—even though the injunction merely accelerates efforts that the State would be required to undertake regardless.

Fourth, the district court appropriately balanced the equities, taking into account the interests of the State and its citizens as well as the Tribes (which the State ignores).

ARGUMENT

More than 150 years ago, in exchange for ceding millions of acres of land in western Washington and obtaining only small reservations, the Tribes secured federal protection for their pre-existing "right of taking fish." The courts below correctly held that the State has violated that right by building and maintaining culverts that prevent salmon from reaching the Tribes' traditional fisheries. Just as the State may not cut the Tribes off from their fisheries, neither may the State substantially degrade or destroy those fisheries by obstructing the salmon.

A. The "Right Of Taking Fish," Reserved To The Tribes Under The Stevens Treaties, Includes A Right Against Substantial Degradation Of Tribal Fisheries

Because a "treaty, including one between the United States and an Indian tribe, is essentially a contract between two sovereign nations," any interpretation must seek to give effect to "the intention of the parties." *Washington* v. *Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 675 (1979). But in recognition of the United States' "superior negotiating skills and superior knowledge of the language in which the treaty is recorded," this Court has construed Indian treaties "'not according to the technical meaning of its words to learned lawyers, but in the sense in which they would naturally be understood by the Indians.'" *Id.* at 675-676 (quoting *Jones* v. *Meehan*, 175 U.S. 1, 11 (1899)); see *id.* at 667 n.10 (interpreter in Stevens Treaties negotiations used limited "'Chinook jargon' to explain treaty terms," and that jargon "was imperfectly (and often not) understood by many of the Indians") (citation omitted). This Court accordingly has looked "beyond the written words to the larger context that

frames the Treaty, including the history of the treaty, the negotiations, and the practical construction adopted by the parties." *Minnesota* v. *Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 196 (1999) (citation and internal quotation marks omitted).

In this case, both text and context strongly support reading the Stevens Treaties as protecting tribal fisheries against substantial degradation caused by the State's barrier culverts. Just as the State cannot interfere with the right of tribal members to fish at their usual and accustomed grounds, neither can it render that right meaningless by obstructing and depleting the fish runs.

1. The treaty signatories intended to protect tribal fisheries from obstructions that would substantially degrade the resource

Prior to the Stevens Treaties, the Tribes possessed an unfettered right to draw salmon and steelhead from their traditional fisheries, a right "upon the exercise of which there was not a shadow of impediment." *United States* v. *Winans*, 198 U.S. 371, 381 (1905). But the Tribes knew as well that they would be unable to fish in perpetuity unless the resource was protected against overfishing. When Governor Stevens asked the Tribes to cede nearly all of their land, in return for a promise to secure their "right of taking fish," both sides thus understood that he was offering them more than just an opportunity to draw from ever-diminishing stocks.

a. Early explorers of the Oregon Territory left impressed by the fish-eating Indians they encountered. The taking of salmon, one reported, "seems to have been conceded to them as an inherent right, which no white man has yet encroached upon." H.R. Misc. Doc. No. 29, 30th Cong., 1st Sess. 27 (1848). The Tribes were,

of course, "almost entirely dependent upon salmon for their subsistence." *Ibid.* But they regarded the fish with more than mere "solicitude [for] and interest" in a food source; they looked upon it with "feelings of religious solemnity and awe." *Ibid.* Tribal rituals "endow[ed] the fish with supernatural qualities," and salmon drawn from early runs were venerated before the community in a "First Salmon ceremony." J.A. 143a; see J.A. 143a-144a ("The first fish was usually placed with its head pointing upstream so the rest of the salmon would continue upstream and not turn back to the sea.").

The Tribes' dependence on and reverence for salmon is reflected in their "develop[ment of] effective tools that managed this vital resource and protected it from depletion." J.A. 142a. The Tribes prohibited conduct that might deter the salmon from returning to traditional fishing grounds. See J.A. 141a ("Indian taboos discouraged disturbing stream beds and muddying waters during runs."); J.A. 143a ("No rubbish or food scraps were to be tossed in the river, no canoes were to be bailed out in it."). They also "mitigated the impact of their efficient fishing technologies on stocks" by implementing measures designed to let sufficient numbers of migrating fish pass through their fisheries unharmed. J.A. 142a. These measures were reinforced by legends. See J.A. 143a (Skokomish belief "that if they failed to open their weirs," the salmon "might take offense" and "not return the following year"); see also J.A. 142a. The Tribes thus saw themselves as stewards of a precious and vulnerable resource, with a shared responsibility to "ensure the continued abundance of the salmon fishery

on which they depended, encouraging the salmon to return year after year." J.A. 144a.

b. By the time Governor Stevens and his associates began negotiating with the Tribes, "whites and Indians on Puget Sound had been in steady contact for over twenty years." J.A. 126a. They were therefore keenly aware during the negotiations of the "vital" role that the tribal fisheries served. J.A. 127a. Negotiators sought to dissuade the Tribes from "retain[ing] a large amount of land," to which "they would be confined"; they explained instead that the Tribes should keep only a "small tract," along with the right to continue using their traditional fishing grounds. J.A. 129a. Governor Stevens also believed that advocating that combination—limited territory for the Tribes, paired with continued rights in their usual fisheries—would help him carry out "his very clear instructions to keep the cost of the treaty down." J.A. 130a; see *ibid.* ("By guaranteeing the Indians a right to their share of the bounty of the land, rivers, and Sound, the treaties would enable them to feed themselves at little cost to the government.").

Governor Stevens accordingly spoke to the Tribes in terms that made clear that he had no intention to disturb their traditional relationship to the salmon harvest. The Yakamas, for instance, were told that they "would forever be able to continue the same off-reservation food gathering and fishing practices as to time, place, method, species and extent as they had or were exercising." *Fishing Vessel*, 443 U.S. at 667 (citation omitted). Promises to other Tribes were similarly unequivocal. See *id.* at 667 n.11 ("This paper is such as a man would give to his children and I will tell you why. * * * This paper secures your fish[.]") (citation omitted); J.A. 128a-129a (interpreter "reassured the Indians

that they were 'not called upon to give up their old modes of living and places of seeking food'"). Governor Stevens thus told the Indians at the Port Elliott Treaty that a treaty with the government meant they would "not have simply food and drink now but that [they] may have them forever." J.A. 132a.

c. The language of the Stevens Treaties is consistent with the parties' understanding that the Tribes were obtaining protection against degradation of their fisheries by others. The treaties "secured" to the Tribes "[t]he right of taking fish, at all usual and accustomed grounds and stations * * * in common with all citizens of the Territory." Treaty of Medicine Creek art. III. As this Court has explained, that provision "was not a grant of rights *to* the Indians, but a grant of rights *from* them—a reservation of those not granted." *Winans*, 198 U.S. at 381 (emphasis added); see *Fishing Vessel*, 443 U.S. at 678 ("The fishing clause speaks of 'securing' certain fishing rights, a term the Court has previously interpreted as synonymous with 'reserving' rights previously exercised."). The Stevens Treaties thus preserved the Tribes' pre-existing "right of taking fish" at their traditional fisheries. The treaties merely added a "limitation" specifying that the right was no longer "exclusive," but would thenceforth be exercised "'in common with citizens of the Territory.'" *Winans*, 198 U.S. at 381.

Because the Stevens Treaties did not grant the Indians a new right, but instead "effect[ed] a reservation of a previously exclusive right," *Puyallup Tribe, Inc.* v. *Department of Game*, 433 U.S. 165, 176 n.16 (1977) (*Puyallup III*), the treaties must be read in a manner consistent with the Tribes' understanding of that pre-existing right. See *Fishing Vessel*, 443 U.S. at 678-679. And as described above, the Tribes understood that a

fishery's ongoing viability required "protect[ing] it from depletion." J.A. 142a. The Tribes therefore could not have heard Governor Stevens promise that the government would secure their fisheries "forever," J.A. 132a, without understanding that the government (and its successors) would refrain from taking actions to substantially degrade or even destroy those fisheries.

A contrary reading, moreover, would be inconsistent with the purposes of the Stevens Treaties. It would make little sense for the Tribes to secure protection for their right of access to traditional fisheries, yet allow obstructions preventing fish from traveling to those same fisheries or returning to their spawning grounds to perpetuate the species. The Tribes agreed to accept smaller reservations of land because they were assured that, in return, they would receive strong protection for their most precious and vital resource. See *Fishing Vessel*, 443 U.S. at 676 ("[T]he Governor's promises that the treaties would protect that source of food and commerce were crucial in obtaining the Indians' assent."). For his part, Governor Stevens sought to ensure that even "after the huge cessions that the treaties proposed the Indians would still be able to feed themselves," thus avoiding the need for governmental subsidies. J.A. 132a; see J.A. 130a. To read the Stevens Treaties in a contrary manner, as promising the Indians "access to their usual and accustomed fishing places, but with a qualification that would allow the government to diminish or destroy the fish runs," would accordingly be more than just "cynical and disingenuous." Pet. App. 91a-92a. It would contradict the very purposes for which the treaties were negotiated.

2. Contemporaneous sources of law protected fisheries against obstructions

The legal backdrop against which the Stevens Treaties were negotiated strongly supports the conclusion that the Tribes' "right of taking fish" included protection against obstructions that could destroy their fisheries. The Indians with whom Governor Stevens negotiated were not "learned lawyers," *Fishing Vessel*, 443 U.S. at 676 (citation omitted), and they likely were unaware of these legal principles. But they nevertheless would have expected, at a minimum, no *lesser* protection for their fishing rights than were enjoyed at that time by other "citizens of the Territory," with whom the Tribes were to share the fisheries "in common." Treaty of Medicine Creek art. III; see *Fishing Vessel*, 443 U.S. at 676 n.22 (tribal fishing rights under Stevens Treaties "are admittedly not 'equal' to, but are to some extent greater than, those afforded other citizens").

a. From the start, Congress recognized the existence of a "valuable fishery" in the Oregon Territory and took steps to ensure that the salmon there would not be "driven out" by obstructions. Cong. Globe, 30th Cong., 1st Sess. 1020 (1848). The Territory's Organic Act accordingly provided "[t]hat the rivers and streams of water in said Territory of Oregon in which salmon are found * * * *shall not be obstructed* by dams or otherwise, unless such dams or obstructions are so constructed as to allow salmon to pass freely up and down such rivers and streams." Act of Aug. 14, 1848, § 12, 9 Stat. 328 (emphasis added). That provision was incorporated into the law of the Washington Territory shortly before the Stevens Treaties were negotiated, see Act of Mar. 2, 1853, § 12, 10 Stat. 177, a protection of which Governor Stevens was undoubtedly aware.

b. Protection against fishery-depleting obstructions also has deep roots in the Anglo-American legal tradition. British common law authorities recognized that possession of a fishery came with an implied "right" in the free passage of migratory fish. *Weld* v. *Hornby*, (1806) 103 Eng. Rep. 195 (K.B.) 199. The erection and use of stone weirs, "through which the fish could not insinuate themselves," were accordingly considered "as public nusances." *Id.* at 198-199; see J.B. Phear, *A Treatise on Rights of Water* 29-30 (London 1859) ("[T]he owner of the land * * * cannot do anything which shall sensibly affect the natural supply of fish in the parts of the stream belonging to other proprietors.").

Early American case law adopted the same view, which was understood to be "founded upon that universal principle of every just code of laws, *Sic utere tuo ut alienum non lædas*," *Commonwealth* v. *Chapin*, 22 Mass. (5 Pick.) 199, 207 (1827), that is, "Use your own property such that you do not injure another's." As the Massachusetts Supreme Judicial Court explained, "[t]he value of [a] fishery depends on the shoals of fish that enter the river to pass to the ponds above to cast their spawn: and if none were allowed to pass, the fishery would be of little value." *Stoughton* v. *Baker*, 4 Mass. (1 Tyng) 522, 527 (1808). Riparian land owners were thus obligated not to take any affirmative action to substantially inhibit fish migration, an obligation that applied regardless of whether the obstruction was upstream or downstream. See *Hart* v. *Hill*, 1 Whart. 124, 137 (Pa. 1836) ("The owner of the land * * * must not, even out of fishery season, do any act which will injure or destroy the fishery."); *Shaw* v. *Crawford*, 10 Johns. 236, 238 (N.Y. 1813) (per curiam) ("Every owner of a

mill-dam on a stream which fish from the ocean annually visit, is bound to provide a convenient passage way for the fish to ascend."); see also *Chapin*, 22 Mass. (5 Pick.) at 205.

By the time of the Stevens Treaties, these common law principles had gained near universal recognition in America. Those who acquired land adjacent to rivers and streams in which migratory fish passed thus held their property "subject to the qualification" that they could not use it "to impede the passage of fish up the river by means of dams or other obstructions." Joseph K. Angell, *A Treatise on the Law of Watercourses* 83 (Boston 1854); see 2 Francis Hilliard, *The American Law of Real Property* 145 (New York 1855) (similar); 3 James Kent, *Commentaries on American Law* 504 (New York 1854) (Such an "impediment was at common law a nuisance."); see also Humphrey W. Woolrych, *A Treatise of the Law of Waters* 170-171 (Philadelphia 1853). These authorities reinforce the conclusion that the Stevens Treaties, by securing the Tribes' rights in their traditional fisheries, also secured the usual legal protection against obstructions that would substantially degrade or destroy those fisheries. See *Wilson* v. *Omaha Indian Tribe*, 442 U.S. 653, 666 (1979) (treaty must be construed "in light of the common notions of the day"); see also *Fishing Vessel*, 443 U.S. at 686 n.27 (construing Stevens Treaties consistent with traditional "presum[ptions]" under "Anglo-American common law").

3. Precedents of this Court confirm that the "right of taking fish" includes protection against substantial depletion of the fisheries

The past hundred years have seen repeated litigation over fishing rights under the Stevens Treaties. As a consequence, this Court has on a number of occasions

been called upon to interpret and apply the Tribes' "right of taking fish." Although the circumstances of these disputes have varied, the Court's decisions have consistently emphasized the need, in accordance with the treaties, to protect fish stocks against degradation of the Tribes' fisheries. And analogous Indian-law precedents, addressing access to other precious natural resources, have taken a similar approach.

a. This Court first addressed the Stevens Treaties in *Winans*. That case involved the use by non-Indians of "fish wheels," which were devices for drawing large numbers of salmon from the streams. 198 U.S. at 379. The Solicitor General, on behalf of the Yakama Tribe, argued that the fish wheels were capable of "catch[ing] salmon by the ton" and thus "rapidly diminishing the supply," *id.* at 372, and he urged the Court to impose limitations "as to their number, method and daily hours of operation," *id.* at 375. The owners of the fish wheels argued in response that the Yakama Treaty guaranteed the Indians only the right to equal treatment under state law; having obtained from the State valid licenses for the fish wheels, therefore, the owners claimed they could not be restrained in using the devices. *Id.* at 379.

This Court concluded that the Yakama Treaty would have meaningful effect only if it was interpreted as "reserv[ing]" for the Tribe's members a right to continue catching fish in their usual and accustomed fisheries. *Winans*, 198 U.S. at 381. The fish wheels, the Court explained, put that right in jeopardy. See *id.* at 382. The Court accordingly remanded for the Circuit Court to devise an "adjustment and accommodation" along the lines proposed by the Solicitor General. *Id.* at 384. As this Court later explained, that disposition "clearly included removal of enough of the fishing

wheels to enable some fish to escape and be available to Indian fishermen upstream." *Fishing Vessel*, 443 U.S. at 681; see U.S. Br. at 55, *Winans*, *supra* (No. 180) ("Certainly the wheels should not be permitted to create and maintain a monopoly until all the fish are gone.").

Also significant is a trio of decisions regarding the Treaty of Medicine Creek, signed by the Puyallup and Nisqually Tribes in 1854. In the first case, the question was whether the treaty allowed the State of Washington to ban use by the Tribes, at their traditional fisheries, of certain fishing nets for catching salmon and steelhead. *Puyallup Tribe* v. *Department of Game*, 391 U.S. 392, 397-398 (1968). The Court concluded that the treaty preserved the State's ability to enact "nondiscriminatory measures for conserving fish resources." *Id.* at 399. But it remanded to the lower courts to determine "[w]hether the prohibition of the use of set nets in these fresh waters was a 'reasonable and necessary' conservation measure," *id.* at 401 (citation omitted), and also whether the restrictions had been adopted in a manner that discriminated against the Indians, *id.* at 403.

Following remand, Washington reinstated "its total prohibition of net fishing for steelhead trout." *Department of Game* v. *Puyallup Tribe*, 414 U.S. 44, 46 (1973) (*Puyallup II*). This Court invalidated the prohibition, concluding that the State had discriminated by barring "all Indian net fishing" while permitting "hook-and-line fishing" engaged in by non-Indian fishermen. *Id.* at 48. The Court remanded for a determination regarding "what degree of net fishing plus fishing by hook and line would allow the escapement of fish necessary for per-

petuation of the species." *Ibid.* And the Court emphasized again that the State was authorized under the treaty to adopt nondiscriminatory measures to protect the fisheries shared by the Tribes and the State. See *id.* at 49 ("[T]he Treaty does not give the Indians a federal right to pursue the last living steelhead until it enters their nets."); *id.* at 50 (White, J., concurring) ("[T]he Indian fishery cannot take so many fish that the natural run would suffer progressive depletion.").

Puyallup III involved yet another dispute over the Puyallup Tribe's treaty rights, this time regarding the State's authority to regulate fishing on the Tribe's reservation in order to protect the shared resource. 433 U.S. at 167. The Court concluded that the Tribe's members were subject to reasonable regulation for on-reservation fishing, at least insofar as the fishing occurred on land no longer owned by the Tribe. *Id.* at 173-177. But the Court emphasized, yet again, the importance of preserving the stock of fish, explaining that allowing the Tribe's members to take fish until the point of extinction would "totally frustrate * * * the rights of the non-Indian citizens of Washington recognized in the Treaty of Medicine Creek." *Id.* at 176.

Finally, in *Fishing Vessel*, this Court held that the Stevens Treaties guaranteed to the Tribes a share of the salmon and steelhead that pass through their traditional fisheries, rather than merely an "equal opportunity" with non-Indians to attempt to catch fish. 443 U.S. at 676. The Court also determined that the Tribes were entitled to a 50% "equitable" share of "each run that passes through a 'usual and accustomed' [fishing] place." *Id.* at 685. Their 50% share, however, could be reduced if a lesser amount was sufficient to "assure[] that the Indians' reasonable livelihood needs would be

met." *Ibid.* That division, the Court explained, would appropriately "prevent [the Tribes'] needs from exhausting the entire resource and thereby frustrating the treaty right of all other citizens of the Territory." *Id.* at 686 (brackets and internal quotation marks omitted).

A common thread running through these decisions is the Court's recognition that the Stevens Treaties were intended to protect against the "progressive depletion" of treaty fisheries by human activity. *Puyallup II*, 414 U.S. at 50 (White, J., concurring). The Court has accordingly interpreted the Tribes' "right of taking fish" in light of that basic goal, ensuring that the Tribes have "meaningful use of their accustomed places to fish," *Fishing Vessel*, 443 U.S. at 676, while simultaneously preventing either the Tribes or non-Indians from engaging in behavior that might threaten the "perpetuation of the species," for the benefit of both. *Puyallup II*, 414 U.S. at 48. For the same reasons, the Tribes' right should be interpreted as including protection against substantial depletion of their fisheries through imposition of impassable obstructions by the State. Any other approach, this Court has recognized, would undermine the shared resource and "totally frustrate" the treaties' purpose. *Puyallup III*, 433 U.S. at 176; see *Winans*, 198 U.S. at 381 ("No other conclusion would give effect to the treaty.").

b. Interpreting the Tribes' "right of taking fish" as securing protection for their fisheries is also consistent with this Court's decisions concerning tribal water rights. In *Winters* v. *United States*, 207 U.S. 564 (1908), the Court held that the express reservation of land for the Fort Belknap Indian Reservation impliedly reserved a sufficient interest in water from the river to fulfill the purposes of the reservation. *Id.* at 576-577.

Without enough water to irrigate their land, the Court explained, the reservation would become "practically valueless" to the Indians, thereby "impair[ing] or defeat[ing]" Congress's reasons for creating it. *Ibid.* The Court accordingly upheld an injunction barring non-Indians from diverting upstream water that was required to irrigate reservation lands. *Ibid.*

Following *Winters*, other decisions of this Court have upheld the principle that when Congress creates an Indian reservation, it reserves for the tribe's use a quantity of water "necessary to accomplish the purposes for which the reservation was created." *Cappaert* v. *United States*, 426 U.S. 128, 139 (1976); see *Arizona* v. *California*, 373 U.S. 546, 599-601 (1963); *United States* v. *Powers*, 305 U.S. 527, 532-533 (1939). That principle, which derives in part from the assumption that Congress always "intend[s] to deal fairly with the Indians," applies absent statutory or treaty language to the contrary. *Arizona*, 373 U.S. at 600. For the same reasons, only a subsequent congressional enactment can divest the tribe of its water rights. See *Powers*, 305 U.S. at 533.

The *Winters* line of cases supports reading the Stevens Treaties to include protection for tribal fisheries against substantial depletion. The government well knew that the Tribes had a "vital and unifying dependence on anadromous fish." *Fishing Vessel*, 443 U.S. at 664. Such fish were no less important to them than irrigation was to the Indians on the Fort Belknap Reservation. And like other tribes whose water rights have been protected, the Tribes "were invited by the white negotiators to rely and in fact did rely heavily on the good faith of the United States to protect" their fisher-

ies. *Id.* at 667. Such protection was accordingly necessary "to carry out the purposes of the treat[ies]." *Id.* at 688. Indeed, unlike in *Winters*, where the reservation of water was implied, here the Stevens Treaties *expressly* secure the right of taking fish.

The State argues (Br. 39) that reliance on *Winters* here would be "misguided" for several reasons, but none is persuasive. The State first asserts (*ibid.*) that the *Winters* doctrine applies only to the "reserving [of] lands, not treaty rights." That is incorrect. In *Powers*, for instance, the Court held that tribal water rights were impliedly reserved under an 1868 treaty with the Crow Indians. See 305 U.S. at 528-529, 532-533. The Court upheld the Indians' rights because "nothing in the statutes after 1868 [was] adequate to show Congressional intent" to deny them access to "essential water * * * guaranteed by the Treaty." *Id.* at 533. Washington's argument, moreover, ignores that this Court relied on the *Winters* doctrine in *Fishing Vessel*, where it construed the Tribes' fishing rights under the Stevens Treaties to be consistent with a "like interpretation" applied in the water-rights context. 443 U.S. at 684; see *id.* at 685-686 (relying on *Winters* and *Arizona* in determining the appropriate allocation of the fish harvest).

Washington next contends (Br. 40) that, unlike the water rights at issue in *Winters*, "where the necessity was apparent as of the moment the lands were reserved," fishing rights are far less important to the Tribes and to "the purpose of the treaties." That contention simply cannot be reconciled with the historical record. See *Winans*, 198 U.S. at 381 (fishing rights "were not much less necessary to the existence of the Indians than the atmosphere they breathed"); see also J.A. 128a. And Washington's further assertion (Br. 40)

that, even absent treaty protection, "the State has strong incentives and a demonstrated commitment to preserve salmon runs"—in addition to contradicting the detailed findings of the district court, see pp. 51-52, *infra*—has little bearing on the proper interpretation of treaties signed in 1854 and 1855. In any event, the Tribes' century-long experience with the State, see pp. 3-5, *supra*, shows that such incentives are not an adequate substitute for treaty protection.

Finally, Washington argues that *Winters* cannot support imposition of an "amorphous obligation" to protect the Tribes' fisheries because this Court in *Arizona* rejected, as too indeterminate, a proposed allocation of water equivalent to the Indians' "'reasonably foreseeable needs.'" Pet. Br. 40 (citation omitted). That argument, however, concerns the appropriate measure of the treaty right, not whether the treaty right exists as an initial matter.

4. The State mischaracterizes the decisions below as guaranteeing the Tribes a minimum standard of living

Throughout its brief, the State characterizes the rulings below (Br. 32) as having interpreted the Stevens Treaties to "guarantee[ ] a permanent standard of living from fishing." See Br. 34 ("moderate living from fishing"); see also Br. 26, 36, 37, 39. The State argues (Br. 31) that inferring such a guarantee would create an unworkable "new right," one which lacks support in the treaties' text and negotiating history, as well as this Court's precedents. But the State mischaracterizes the rulings below and ignores the actual scope of relief requested, granted, and upheld on appeal.

a. The current proceeding was initiated by the Tribes, which requested an injunction prohibiting the

State and its agencies "from constructing or maintaining any culverts beneath State highways that block passage of fish that would otherwise return to or pass through tribal usual and accustomed grounds and stations," as well as directing the State to remediate its barrier culverts to ensure "fish passage." J.A. 54a. The injunction requested by the United States was similar, seeking to require the State to cease building new culverts, and to replace existing ones, that "degrade appreciably [the] passage of fish that otherwise would pass through usual and accustomed fishing grounds and stations so as to deprive the Tribes of the ability to earn a moderate living from the fishery." J.A. 63a; see J.A. 63a-64a. The United States' injunctive request, although it used the phrase "moderate living," did not call on the State to *guarantee* a moderate living to the Tribes from fishing, nor to guarantee any other minimum standard. Rather, it requested that the State stop building or maintaining barrier culverts that "degrade appreciably" the Tribes' fisheries. J.A. 63a.

The district court correctly understood that no party was requesting the guarantee of a "moderate living." It criticized the State for proceeding "on a faulty premise by suggesting that the Tribes are suing to enforce their right to earn a moderate living." Pet. App. 280a. The court instead found it "clear" that "the plaintiffs are seeking to prevent the state from interfering with the treaty right of taking fish by affirmatively diminishing the number of fish available for harvest." *Ibid.* And the court granted an injunction—which never used the phrase "moderate living" or any equivalent—that ordered the State to undertake concrete steps closely tailored to that specific goal. *Id.* at 235a-242a.

The court of appeals upheld the injunction. Pet. App. 126a. The court explained that the injunction was necessary because the State had a "treaty-based duty to refrain from building and maintaining barrier culverts." *Id.* at 86a. The court did, at one point, state that the treaties included "a promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes," *id.* at 94a (citation omitted), a statement that the State quotes repeatedly here (Br. i, 1, 25, 27, 31, 32, 38, 43). But Judge Fletcher, who wrote the panel opinion, explained at the rehearing stage that the opinion "does not hold that the Tribes are entitled to enough salmon to provide a moderate living, irrespective of the circumstances." Pet. App. 10a. Rather, he noted, the panel "h[e]ld only that the State violated the Treaties when it acted affirmatively to build roads across salmon bearing streams, with culverts that allowed passage of water but not passage of salmon." *Id.* at 10a-11a. In any event, the panel's statement could not alter its actual holding or the scope of relief ordered.

b. The State's mischaracterization of the decisions below is particularly notable because the State now largely appears to *agree* with the lower courts' construction of the Stevens Treaties. Relying on *Fishing Vessel*, the State maintains that a court "'may enjoin those who would interfere with' the court's custody of the res, here, the fishery. Thus, if anyone acted to destroy the fisheries that are subject to allocation, the district court could enjoin such destruction." Pet. Br. 41 (quoting 443 U.S. at 692 n.32). The State cites approvingly an injunction formerly upheld by the court of appeals that was designed to ensure "the safe passage of every salmon [that] was necessary to preserve the species." *Ibid.* (quoting *United States* v. *Oregon*, 657 F.2d

1009, 1011 (9th Cir. 1981) (Kennedy, J.)). And the State also argues (Br. 42) that "a State decision to destroy the fishery would necessarily involve some degree of discrimination against tribes, and could be enjoined on that basis as well."

Those arguments contradict the position that the State took earlier in this litigation, where it argued that it "ha[d] the right, consistent with the Treaties, to block every salmon-bearing stream feeding into Puget Sound." Pet. App. 87a; see *id.* at 88a (counsel's statement at oral argument). But the State's new position in effect aligns with the decisions below and the position of the United States and the Tribes. The district court found and the court of appeals agreed, see *id.* at 95a, that removal of state-owned barrier culverts was necessary to preserve salmon stocks against substantial depletion and thus to prevent "interfere[nce]" with tribal fisheries. Pet. Br. 41 (citations omitted). The State may dispute that its actions have caused such interference, but that at most constitutes a disagreement with the district court's factual findings regarding the effects of the State's barrier culverts, not a disagreement about the underlying legal obligation.

5. The State's other arguments concerning interpretation of the Stevens Treaties are unpersuasive

a. The State argues (Br. 32) that the Stevens Treaties cannot be read to afford substantive protection for the Tribes' fisheries in the absence of explicit treaty "text" to that effect. But the treaties were "not a grant of rights to the Indians," but rather a "reservation" of their pre-existing fishing rights. *Winans*, 198 U.S. at 381. As shown above, those pre-existing rights were understood to include protection against obstructions. See pp. 20-24, *supra*.

This Court has also refused, when interpreting Indian treaties, to "suppose[] that the Indians were alert to exclude by formal words every inference which might militate against or defeat the declared purpose of themselves and the Government." *Winters*, 207 U.S. at 577. For instance, no explicit language in the Stevens Treaties promised the Tribes the right to a "share" of the salmon harvest, and yet the Court in *Fishing Vessel* found it "unambiguous" that such a right existed. 443 U.S. at 679. And *Fishing Vessel* recognized that right despite the negotiating parties' expectations that salmon stocks would forever remain "inexhaustible," *id.* at 669, showing that the State is wrong to assume (Br. 34) that the parties therefore could not have intended protection for the Tribes' fisheries.

For similar reasons, the State is wrong to rely (Br. 31-32) on other Indian-law precedents that have "rejected claims that lacked support in treaty language." Both cases cited by the State (*ibid.*) limited tribes' off-reservation rights based on treaty language that *expressly* granted rights only "within the limits of the reservation." *Oregon Dep't of Fish & Wildlife* v. *Klamath Indian Tribe*, 473 U.S. 753, 766 (1985); see *id.* at 767 (right to fish only in streams and lakes "included in said reservation") (citation omitted); *Oklahoma Tax Comm'n* v. *Chickasaw Nation*, 515 U.S. 450, 465 (1995) (right to property only "within their [*i.e.*, the tribe's] limits") (citation omitted). No similar treaty language limits the right invoked by the Tribes here.

b. The State argues (Br. 38) that the court of appeals' decision is "irreconcilable" with *Fishing Vessel* because the Court there "made clear that the 'moderate living' standard is an equitable limit the State could invoke in the future as a ceiling on the tribal share of the

catch, not a floor on fish harvests that the treaties always guaranteed." But *Fishing Vessel* described, as "the central principle" of allocation, the Tribes' right under the Stevens Treaties to "so much as, but no more than, is necessary to provide the Indians with a livelihood—that is to say, a moderate living." 443 U.S. at 686. In this case, the district court and the court of appeals determined that the Tribes had been rendered unable to achieve even a moderate living from their fisheries; that finding, along with many others, supported the conclusion that the State's barrier culverts had degraded those fisheries in violation of the Stevens Treaties. See Pet. App. 95a. *Fishing Vessel* is consistent with that conclusion.

c. The State asserts (Br. 43) that the decisions below are "unworkable" because no court or party has "provided a workable definition of 'a moderate living' from fishing." That argument rests on the same "faulty premise," just addressed, "that the Tribes are suing to enforce their right to earn a moderate living." Pet. App. 280a. The district court found it "unnecessary" to define the term here in light of the Tribes' showing that the State's barrier culverts have substantially degraded the fisheries, resulting in the "impairment of [the Tribes'] treaty rights." *Id.* at 263a. The State also ignores that the "moderate living" standard was articulated by this Court in *Fishing Vessel*, as a measure of the Tribes' fair allocation of the fish harvest. 443 U.S. at 686. That same standard has been applied by the lower courts since. See *United States* v. *Washington*, 157 F.3d 630, 651-653 (9th Cir. 1998), cert. denied, 526 U.S. 1060 (1999). In any event, the State now agrees that the treaties would support an injunction forbidding

the State "to *destroy* the fisheries." Pet. Br. 41 (emphasis added). Unless the State means that only the complete destruction of the fisheries would suffice, they offer no touchstone as an alternative to the "moderate living" standard this Court adopted.

d. Finally, the State argues (Br. 44-45) that the court of appeals' decision could be applied to prohibit a large "range of human activities that can affect salmon," leaving the State "paralyzed in its decision-making." Yet as Judge Fletcher explained on rehearing, the decision did not hold that the Stevens Treaties created a right "against all human-caused diminutions [in the salmon population], or even against all State-caused diminutions." Pet. App. 10a; see *id.* at 178a (rejecting notion that State's duty amounts to a "broad environmental servitude"). Rather, the courts below held only that the State may not, by obstructing fish passage, so degrade the Tribes' fisheries that its members are left "unable to harvest sufficient salmon to meet their needs." *Id.* at 158a. The ruling below thus is not "the imposition of an affirmative duty to take all possible steps to protect fish runs, * * * but rather a narrow directive to refrain from impeding fish runs in one specific manner." *Id.* at 271a.[2]

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[2] The State argues (Br. 36) that the interpretation of the Stevens Treaties adopted below "runs contrary to the parties' understanding of the treaties as demonstrated by their own behavior." The State points (*ibid.*) to various "actions" by the federal government that supposedly caused damage to tribal fisheries. Yet the actions cited by the State were initiated several decades—and in some cases a full century—after the treaties were signed. See Pet. Br. 8 & n.6 (citing a "federally-licensed dam in 1924" and the "straightening of Puyallup river" in the mid-1900s). They shed no light on the interpretive question at issue here.

B. The Courts Below Properly Rejected The State's Equitable Defenses

The State argues (Br. 45-52) that, even if it has violated the Tribes' rights under the Stevens Treaties, relief should nevertheless be denied because of conduct by the United States that renders such relief inequitable. The State claims that, when building many of its barrier culverts, it used federal highway funds and followed federal specifications; yet the State claims (Br. 47) that the United States "never said a word" about treaty rights until this litigation. The State's equitable defenses are foreclosed by directly applicable precedent, and in any event they are meritless.

1. The State's equitable defenses do not apply to the United States

As an initial matter, although the State repeatedly refers to its "equitable defenses," it never specifies *which* equitable defenses it means to invoke. In the district court, "Washington asserted a defense of 'waiver and/or estoppel.'" Pet. App. 96a. Yet waiver is not an equitable defense, see 11A Charles Alan Wright et al., *Federal Practice and Procedure* § 2946 (3d ed. 2013) (discussing equitable defenses to injunctive relief, but not waiver), and no government agent would have authority to waive the Tribes' treaty rights, see *Minnesota*, 526 U.S. at 202. As for estoppel, the court of appeals determined that the State abandoned that defense on appeal. See Pet. App. 96a.

Even assuming the State had preserved its estoppel argument, that argument would be foreclosed by this Court's precedents, which make clear that "the United States is neither bound nor estopped by acts of its officers or agents in entering into an arrangement or agreement to do or cause to be done what the law does not

sanction or permit." *Utah Power & Light Co.* v. *United States*, 243 U.S. 389, 409 (1917). In *Utah Power & Light*, the United States sought injunctive relief against a power company that had, without legal authority, erected "dams, reservoirs, pipe lines, power houses, [and] transmission lines" on a federal forest reservation. *Id.* at 402. The company claimed that its actions had been authorized by "officers or agents of the United States," on whose permission the company had relied, and that the United States was therefore "estopped to question" the company's conduct. *Id.* at 408. This Court rejected that defense in a single sentence, quoted above, and it upheld the injunction. *Id.* at 409, 411.

Other decisions have applied the same principle, including where estoppel has been asserted against relief sought by the United States on behalf of Indian tribes. See *Cramer* v. *United States*, 261 U.S. 219, 234 (1923) ("The acceptance of leases for the land from the defendant company by agents of the Government was, under the circumstances, unauthorized and could not bind the Government; much less could it deprive the Indians of their rights."); *Pine River Logging Co.* v. *United States*, 186 U.S. 279, 290 (1902) (estoppel inapplicable where company's timber logging, in violation of Indian treaty rights, was done "under the superintendence of a government agent, who personally directed what timber should be cut"). Accordingly, the State cannot claim (Br. 46) that the United States is foreclosed from obtaining relief on behalf of the Tribes because the State built its barrier culverts in reliance on federal funds, specifications, or permits.

Finally, the State's allegation (Br. 46) that the United States failed to object to the State's barrier cul-

verts, "throughout the many decades" in which the culverts were built and maintained, is essentially an invocation of the equitable defense of laches. Yet "laches is not imputable to the Government." *United States* v. *Kirkpatrick*, 22 U.S. (9 Wheat.) 720, 735 (1824) (Story, J.); see *Utah Power & Light*, 243 U.S. at 409 (rejecting defendant's laches argument that "officers and employees of the Government, with knowledge of what the defendants were doing, not only did not object thereto but impliedly acquiesced therein"); *United States* v. *Beebe*, 127 U.S. 338, 344 (1888) ("[T]he United States are not * * * barred by any laches of their officers, however gross, in a suit brought by them as a sovereign Government."); *United States* v. *Thompson*, 98 U.S. (8 Otto) 486, 488-489 (1879). That principle, too, has been repeatedly invoked in the Indian-rights context. See *Board of Cnty. Comm'rs* v. *United States*, 308 U.S. 343, 351 (1939) (rejecting applicability of laches "to suits by the Government, whether on behalf of Indians or otherwise"); *United States* v. *Minnesota*, 270 U.S. 181, 196 (1926).

2. This Court's decision in* City of Sherrill *does not support the State's defenses

The State nonetheless contends (Br. 48-52) that its equitable defenses are supported by this Court's decision in *City of Sherrill* v. *Oneida Indian Nation of New York*, 544 U.S. 197 (2005). In *City of Sherrill*, the Oneida Indian Nation purchased, in the late 1990s, fee land that had been part of its historic reservation but had not been within the Nation's control for 200 years. *Id.* at 202. The Nation then asserted that its purchases had "unified fee and aboriginal title," such that the Nation could "now assert sovereign dominion over the parcels" to bar imposition of city taxes. *Id.* at 213. This

Court rejected the Nation's argument. Because the Nation had not exerted control over the land for two centuries, and because its reassertion of control after such a "long lapse of time" would upset "longstanding observances and settled expectations," the Court held that the Nation's attempt was foreclosed by principles of equity, particularly laches. *Id.* at 216-218; see *id.* at 216-221.

City of Sherrill does not assist the State here. Most notably, the United States was not a party there, and no equitable defense was applied against it. No reason exists, therefore, to believe that the Court had overturned, *sub silentio*, principles that have governed since before the Founding. See *Thompson*, 98 U.S. (8 Otto) at 489-490.

The State's argument here is also wholly unlike the rationale of *City of Sherrill*. There, an equitable bar was imposed against the same party (the Oneida Indian Nation) that had been found to have slept on its rights. In this case, by contrast, the State does not claim that the Tribes have done anything "to relinquish their rights under the Treaties," "to authorize the State to construct and maintain barrier culverts," or to "reviv[e] * * * disputes or claims that have long been left dormant." Pet. App. 99a. As *City of Sherrill* explained, laches is "principally a question of the inequity of permitting [a] claim to be enforced," 544 U.S. at 217-218 (citation omitted), and there would be nothing equitable about nullifying the Tribes' treaty rights.

City of Sherrill is fundamentally different in other respects as well. The Court repeatedly emphasized there that the tribe had sought to "unilaterally" reinstate its inherent jurisdiction, 544 U.S. at 203, 219, 220,

221, rather than availing itself of a more "proper avenue" for reestablishing its sovereignty—the federal land-into-trust process, *id.* at 221. Here, by contrast, the Tribes sought relief, alongside the United States, in an already-active federal judicial proceeding. Cases such as *Winans*, the *Puyallup* trio, and *Fishing Vessel* make clear that that was an appropriate path to vindicating treaty rights, and no other "avenue" for protecting those rights existed.

Finally, the State is wrong to argue (Br. 49) that application of *City of Sherrill* is supported by *Nevada* v. *United States*, 463 U.S. 110 (1983), and *Arizona* v. *California*, 460 U.S. 605 (1983). In those cases, the Court applied principles of issue preclusion (in *Nevada*, 463 U.S. at 145) and claim preclusion (in *Arizona*, 460 U.S. at 626) to claims that had been fully litigated, or could have been litigated, by the United States in prior suits that had become final. Those anti-relitigation principles have no application in the present circumstances.

3. Even if equitable defenses were available in this case, the State's defenses would not succeed

The State's equitable defenses are, in any event, meritless. The State asserts (Br. 30) that the United States "designed" its barrier culverts, but that is incorrect. The State claims to have modeled its culverts on a technical reference manual of the Federal Highway Administration entitled "Hydraulic Engineering Circular #10" (HEC#10). J.A. 375a.[3] But neither that nationwide reference manual, nor any federal law, required the State to replicate the culvert designs in HEC#10 or

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[3] A now-superseded version of HEC#10 from 1972 is available at https://www.fhwa.dot.gov/engineering/hydraulics/pubs/hec/hec10.pdf.

"preclude[d] the State from modifying the design standards to accommodate local conditions, such as fish passage." J.A. 735a. The federal publication, moreover, provided only general "industry" standards "for the design of road culverts for hydraulic purposes," J.A. 375a, and it did not "contain[] any direction on how to construct a hydraulic fish passage culvert," J.A. 715a. See J.A. 734a (HEC#10 contains no directions "regarding the design criteria for fish passage"). As the manager of WSDOT's culvert-correction program testified, "the standards for fish passage that [WSDOT] uses are set by the State of Washington Department of Fisheries and *not by the Federal Highway Administration*." J.A. 715a (emphasis added). In fact, when the State recognized, in the 1990s, that some culverts modeled on HEC#10 "failed to provide for adequate fish passage," the State modified its design. J.A. 101a. In sum, the State cannot blame the United States for its own failure to address the fish-passage problem earlier.

Nor is there merit to the State's argument (Br. 46) that the United States cannot seek relief to vindicate the Tribes' treaty rights because the State built many of the culverts using federal funds. The Federal-Aid Highway Program (FAHP) allows the States to choose highway projects to receive federal financial assistance for planning, design, and construction. 23 U.S.C. 145(a). Although projects are completed using federal funds, the construction itself "shall be undertaken by the respective State transportation departments or under their direct supervision." 23 U.S.C. 114(a); see 23 U.S.C. 116(b) ("It shall be the duty of the State transportation department * * * to maintain" FAHP-funded projects.).

And while FAHP-funded projects in the National Highway System must meet minimum design standards,[4] those standards are general and flexible. The standards for "Bridges, Structures, and Hydraulics," 23 C.F.R. Pt. 650 (capitalization and emphasis omitted), do not require the States to use any particular design, and they expressly tell States to take account of "environmental concerns," 23 C.F.R. 650.115(a). Washington's receipt of federal highway funds thus cannot justify or excuse its construction of salmon-blocking culverts.[5]

Finally, the State errs in arguing (Br. 46-47) that the United States should be precluded from seeking relief here because of a long delay in asserting the Tribes' treaty rights. The United States initiated the present suit in 1970, when salmon had "become [so] scarce" that treaty fishermen could no longer sustain themselves from tribal fisheries. *Fishing Vessel*, 443 U.S. at 669. Even before that litigation culminated in this Court's *Fishing Vessel* ruling, the United States in 1976 initiated Phase II, in which it sought a determination that the Stevens Treaties guaranteed the Tribes "a right to have the[ir] fishery resource protected from adverse environmental actions or inactions of the State," J.A. 803a, and it identified "[t]he improper placement of culverts" as one example, J.A. 806a. That proceeding was

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[4] State culverts built under roads that are not in the National Highway System are not subject to federal standards. See 23 U.S.C. 109(*o*); 23 C.F.R 625.3(a)(2).

[5] The State's reliance (Br. 46) on the fact that some of its culverts received Clean Water Act permits is misplaced. The relevant permits, under Section 404 of the Act, see J.A. 78a, were unrelated to the State's treaty obligations. See Pet. App. 279a ("The duties imposed by each originate with different legal sources, and are measured by different legal standards.").

resolved in 1985, without any determination regarding the State's culverts. See pp. 6-7, *supra*. The United States joined this proceeding, which focuses exclusively on the culvert problem, in 2001. J.A. 64a. The United States thus has diligently pursued relief on behalf of the Tribes, and its conduct cannot be compared to the 200-year lapse at issue in *City of Sherrill*.

C. The Injunction Provides Appropriate Relief To Redress The Treaty Violation

Having determined that the State violated the Tribes' treaty rights, the district court issued an injunction requiring the State to accelerate existing efforts to remediate its barrier culverts, while also giving the State ample discretion to implement the injunction in the least-costly and most-efficacious manner. The State "declined to participate in the formulation of the injunction on the ground that it had not violated the Treaties and that, therefore, no remedy was appropriate." Pet. App. 107a. Now, although the State does not identify any clearly erroneous finding of fact, the State nevertheless argues that the injunction was overly broad and inappropriate. The State's arguments are meritless and are refuted by the record.

1. The record shows that replacing the State's barrier culverts will have a substantial impact

The State argues (Br. 53) that the injunction "forces the State to replace culverts where doing so will make no difference to salmon." Because the injunction accelerates remediation for state-owned barrier culverts with "200 lineal meters or more of salmon habitat upstream to the first *natural passage barrier*," Pet. App. 237a (emphasis added), the State claims (Br. 53) that replacement is required even though "other man-made

barriers upstream or downstream prevent salmon from reaching the state culvert or a traditional tribal fishing place." The State's argument is unpersuasive for several reasons.

First, trial evidence showed that non-state barriers tend to be highly clustered upstream from state-owned barriers, so that the State's remediation efforts will allow the salmon access to significant upstream habitat. Where a stream has "both state and non-state barriers," almost 90% of the non-state barriers are upstream of the state-owned barriers. Pet. App. 111a; see J.A. 97a (map showing state barriers on main stems of streams, with other barriers clustered upstream). Even for the minority of non-state barriers that are downstream, most (69%) permit partial "passage of fish." Pet. App. 111a. And as for the other barriers, many state-owned culverts are downstream from only one (20%) or two (10%) non-state barriers, and a plurality (38%) are downstream from *no* non-state barriers. J.A. 445a.

Second, no evidence supports the State's assertion (Br. 53) that replacement of a downstream state-owned barrier "will have no impact" if another man-made barrier exists upstream. Many of the upstream non-state barriers allow partial fish passage, such that eliminating downstream barriers will produce immediate "habitat" benefits. J.A. 779a-780a. And even where non-state barriers block *all* fish passage, they are often far upstream. For instance, on a creek touted by the State as having 36 non-state barriers and only one state-owned barrier, "the nearest non-state barrier is almost a half mile upstream." Pet. App. 111a. The State's own expert testified that correcting a barrier culvert produces a real "benefit" even where the distance to the

next upstream barrier is "short." J.A. 704a. And a different witness for the State also agreed that the presence of non-state barriers upstream is no excuse for failing to correct state-owned barriers downstream. J.A. 754a.

Third, the injunction allows the State to account for the presence of upstream non-state barriers when deciding which of its own barriers to prioritize. The State may defer correcting high-priority culverts (*i.e.*, those blocking more than 200 lineal meters of habitat) that account for up to 10% of "total blocked upstream habitat." Pet. App. 115a. If the State makes "the amount of blocked habitat" the "sole criterion," evidence shows that the State would be permitted to defer remediation of approximately 230 state-owned culverts. *Ibid.* And, of course, the State may defer correction of *all* low-priority culverts until the end of the culvert's useful life, or until an independently undertaken highway project would require replacement anyway. *Id.* at 114a.

Fourth, and perhaps most fundamentally, the State's argument is based on an implicit assumption that other barrier culverts upstream of its own will never be replaced. Nothing in the record supports that assumption. To the contrary, state law requires landowners to remove obstructions, see Wash. Rev. Code Ann. §§ 77.15.320, 77.57.030 (West 2010), and the presence of illegal upstream barriers cannot justify the State in leaving its own barriers in place downstream. In fact, at the time the injunction was issued, hundreds of non-state barriers were being corrected each year, J.A. 633a, and "experience" shows that state action often encourages private landowners to "tak[e] care of their [own] culverts." J.A. 780a. But to realize full benefits

from removing those private barriers, state-owned barriers must also be corrected. J.A. 755a. That is why the State's "priority index" ignores other man-made barriers, rather than treating them as if they were natural barriers. Pet. App. 110a-111a; J.A. 697a. The State correctly notes that "the Priority Index does not *dictate* the order in which the State replaces culverts," Br. 54 (emphasis added), but the State does rely on the index "to help decision-makers prioritize culverts for correction," even if case-specific adjustments are sometimes made, Pet. App. 145a.

2. The record contains ample evidence that barrier culverts have affected salmon harvests

The State asserts (Br. 56-58) that "no persuasive evidence" connects barrier culverts to declining salmon harvests. That assertion is contradicted by "extensive evidence, much of it from the State itself." Pet. App. 115a. A state-agency report identified road culverts as "one of the most recurrent and correctable obstacles to healthy salmonid stocks in Washington." J.A. 427a. Other evidence showed the same. See Pet. App. 161a (analysis of coho salmon in Skagit River tributaries indicating that up to "58% of the loss of salmon production was attributable to barrier culverts"); *id.* at 162a (testimony that barriers can have a "devastating" effect on salmon populations) (citation omitted); see also *id.* at 160a (barriers "reduc[e] productivity and eliminat[e] some populations") (citation and emphasis omitted). Evidence also persuasively showed that correcting barriers—thereby reconnecting habitats—has been proven to have a "high probability of success" for improving salmon populations. J.A. 774a; see Pet. App. 113a ("There's an immediate access and immediate benefit to additional habitat when we replace a culvert.");

id. at 111a-112a (describing positive results from culvert-removal projects on the Stillaguamish and Lower Elwha Rivers).

In response, the State notes (Br. 56-57) that salmon populations declined in the late 1800s "because of overfishing," that the State's highway system "has been essentially the same size since the 1960s," and that salmon harvests "fluctuated enormously" between 1985 and 2003. Yet those facts at most[6] provide circumstantial evidence for the district court's view "that culvert correction is not the only factor in salmon recovery." Pet. App. 114a; see *id.* at 132a. They do not undermine the court's basic finding that "[f]ish passage barrier culverts have a negative impact on spawning success, growth and survival of young salmon, upstream and downstream migration, and overall production." *Id.* at 160a. And they certainly do not show that the court's finding to that effect was clearly erroneous.

3. Nothing in the record supports the State's untimely suggestion that funds would be better spent on other salmon-recovery efforts

Despite having refused to participate in formulating the injunction in the district court, Pet. App. 107a, the State now argues (Br. 55) that its money could be better spent on other—unspecified—"salmon recovery programs." Extensive trial evidence, however, showed that replacing barrier culverts is highly "cost effective" and has "immediate benefit." Pet. App. 113a; see *ibid.* ("the cost per smolt produced is relatively low"); J.A. 689a (barrier replacement provides "the biggest bang for

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[6] Even if the State's highway system has not grown much since the 1960s, the number of state-owned barrier culverts has continued to increase. See Pet. App. 164a.

your buck"); J.A. 782a (expert identified "reconnecting" habitats as highest financial priority). Evidence also showed that barrier replacement has a faster "response time" than other salmon-recovery measures. J.A. 775a; see *ibid.* (study showing that salmon recolonization begins "within a week" of removing obstructions); *ibid.* ("other techniques might take decades before we see [a] response").

The State estimates (Br. 55) that replacing each culvert will cost approximately $2.3 million. But the State supports that figure (Br. 20 n.24) with a citation to extra-record materials that the State itself created. At trial, the State offered a similar estimate, which the district court rejected as inconsistent with the record, noting that the State's "actual cost of construction" has averaged approximately $660,000 per replacement. Pet. App. 170a; see *id.* at 119a (noting that State's own witness listed figure far less than $2.3 million, which itself "could not be confirmed").

The State's projection (Br. 55) that complying with the injunction "will cost over $2 billion" is again supported only by extra-record material—this time, what looks to be a slide-show presentation. See *id.* at 55 n.33. The State produced a similar estimate below, but the court of appeals noted that it was "demonstrably incorrect." Pet. App. 119a. In addition to relying on the same inflated per-culvert estimate discussed above, the $2 billion figure incorrectly assumed that the State would be required to replace "all 817 of the state-owned barrier culverts," ignoring that the injunction permits the State to defer correcting hundreds of its "more costly culverts." *Ibid.* The State's estimate also erroneously assumed that *no* culvert-replacement efforts would occur if not for the injunction, ignoring that the

injunction merely accelerates efforts that the State would be required to undertake "in any case." *Ibid.* Finally, the estimate ignored millions of dollars that the State has received annually in federal funding for barrier correction. *Id.* at 120a; see *id.* at 171a.[7]

4. The district court correctly found that the balance of equities favors providing a remedy for the State's treaty violations

Finally, the State's assertion (Br. 58-59) that the district court ignored the equities in crafting the remedy in this case is contradicted by the court's decision. Pet. App. 176a-179a; see *id.* at 120a-121a. The court simply reached a result with which the State disagrees. The State's one-sided account of the relevant equities (Br. 59), moreover, omits any mention of the Tribes' treaty rights or the State's role in degrading tribal fisheries.[8] Yet the court found that the Tribes "have been harmed economically, socially, educationally, and culturally by the greatly reduced salmon harvests that have resulted from State[-]created or State-maintained fish passage barriers." Pet. App. 176a. That harm is "ongoing," and the State's efforts to address it thus far "have been in-

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[7] As the district court found, nothing supports the State's assertion (Br. 56) that other salmon-recovery efforts (or other vital services) will suffer as a result of the injunction. See Pet. App. 122a-123a, 171a-173a.

[8] The State also suggests (Br. 58) that the injunction is inappropriate because the State is a "nonparty" to the Stevens Treaties. That suggestion is incorrect. See *Winans*, 198 U.S. at 381-382 (treaty rights were "intended to be continuing against the United States and its grantees as well as against the state and its grantees"); see also *Fishing Vessel*, 443 U.S. at 692 n.32 (injunction appropriately applied to "nontreaty fishermen").

sufficient." *Ibid.* The court also found that the injunction would serve "the public's interest," by restoring salmon stocks upon which all its citizens rely. *Id.* at 178a. In sum, as the court of appeals noted, "[i]t was not an abuse of discretion to require the State to pay for correction of its own barrier culverts." *Id.* at 120a.

CONCLUSION

The judgment of the court of appeals should be affirmed.

Respectfully submitted.

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No. 17-269

IN THE

Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.,

Respondents.

On Writ of Certiorari
to the United States Court of Appeals
for the Ninth Circuit

BRIEF FOR THE TRIBAL RESPONDENTS

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QUESTIONS PRESENTED

1. Whether Washington violated a treaty "right of taking fish, at all usual and accustomed grounds and stations ... in common with all citizens," by constructing hundreds of barrier culverts that block salmon from reaching usual and accustomed fishing grounds and that cause many to die before they can reproduce.

2. Whether Washington can assert an equitable defense against the United States based on the theory that the United States made the State use these culvert designs.

3. Whether the district court's injunction is consistent with the court's equitable discretion.

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BRIEF FOR THE TRIBAL RESPONDENTS

The Indian Tribes of western Washington made a bargain with the United States in the 1850s: they would give up vast amounts of their land, so long as they could keep in perpetuity "the right of taking fish, at all usual and accustomed grounds and stations, ... in common with citizens of the Territory." Their fishery meant life to them, spiritually as well as materially. They accordingly signed a series of treaties "securing" that right as part of the bargain.

The right is no longer secure. In hundreds of locations, petitioner Washington has redirected salmon-bearing streams through manmade culverts under state roads. Many of Washington's culverts are impassable to salmon, even though since before the Treaties Washington law has required any structure in a salmon-bearing stream to allow the fish to pass. Because of Washington's barrier culverts, many of the fishing grounds protected by the Treaties—and millions of square meters of fish habitat along hundreds of stream miles—are cut off from the sea. The salmon fishery is degrading significantly. Past a certain tipping point, the decline could become irreversible.

Fixing the culverts is entirely feasible, using technology that Washington itself helped design. The State has known of the barriers for decades, yet responded so slowly that, left to its own devices, it would have taken 100 years to fix just the existing problems.

The State's widespread blockage is a clear violation of the Treaties, and the district court adopted a targeted strategy to alleviate it: Washington must fix culverts that block significant lengths of stream, but it may do so on a schedule that gives it most of two decades. In many cases, Washington can defer repairs until the culvert reaches the end of its useful life and must be replaced anyway.

Although Washington tries to portray it as extreme, the injunction does no more than necessary to remedy blockages that violate the Treaties. Washington, by contrast, argued below that the Treaties give the Tribes *no protection* against having their fishery choked off:

> "[Y]ou could block every salmon stream in the Sound?"
>
> "Your honor, the treaties would not prohibit that."

Pet. App. 88a. Washington now tries to back away from its absolutist position, but fails to show how its widespread stream blockages are consistent with *any* plausible conception of the "right of taking fish." Washington tries to blame the federal government, but the United States never told Washington that its culverts were suitable for fish passage, compliant with the Treaties, or legally required.

Compounding its obstinacy, Washington refused to propose any alternative injunctive provisions to the district court, yet now comes to this Court with picayune and fact-bound complaints about its terms. Washington has shown no abuse of discretion.

STATEMENT

A. The Tribes Have Depended On Salmon For Centuries.

Salmon begin and end their lives with a long journey. They are anadromous fish, spending much of their lives in the ocean but born in freshwater streams. After their juvenile period, young salmon travel downstream to the ocean. And every salmon, if it survives long enough, will make the arduous trip, perhaps hundreds of miles, back upriver to the same stream where it was born. There salmon reproduce and die. J.A.472a-473a.

The journey, both downstream and upstream, is crucial to salmon's survival. Salmon feed heavily and grow rapidly only in the ocean, but to reproduce, they must return to freshwater streams with gravel beds. J.A.473a. Salmon that do not make it downstream to the ocean, and then back upstream to their birthplace, will die without reproducing.

The Indian Tribes of western Washington have depended for centuries on the seasonal return of six species of salmon (including steelhead, formerly considered a trout). Fishing was, and is, central to their way of life. Every one of the Tribes has continued to fish at its historic grounds, even as fishing has become more difficult. Pet. App. 133a.[1]

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[1] The tribal respondents here ("Tribes") are the Confederated Tribes and Bands of the Yakama Nation, Hoh Indian Tribe, Jamestown S'Klallam Tribe, Port Gamble S'Klallam Tribe, Lower Elwha Klallam Tribe, Lummi Nation, Makah Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Nooksack Tribe, Puyallup Tribe, Quileute Indian Tribe, Quinault Indian Nation, Sauk-Suiattle Tribe, Skokomish Indian Tribe, Squaxin

"Salmon" is, literally, synonymous with food to the Tribes. J.A.692a ("[I]n [the Quinault] language the word for salmon is the equal word for 'food.'"). At the time of the Treaties, "fish were vital to the Indian diet," and salmon and steelhead were the Tribes' "most important item of food." *United States v. Washington*, 384 F. Supp. 312, 350, 368, 372 (W.D. Wash. 1974).[2] Fish shortages "imperiled their food supply and caused near starvation." *Id.* at 351. Tribes dried and preserved fish to store against hard times. *Id.* at 351, 368.

But salmon in particular are not *just* food; they are central to the Tribes' belief system and sense of community and identity. *E.g.*, J.A.520a, 693a. Salmon form an integral part of tribal ceremonies—"for name givings ... for deaths, for burials, for recognitions, for birthdays." J.A.693a; *see* J.A.692a ("Our songs, our ceremonies, our subsistence coincide with the salmon."). Tribes perform the First Salmon ceremony, a religious rite, to ensure that the salmon return, J.A.143a-144a, and the salmon symbolizes the central "religious concept of the interdependence and relatedness of all living things." *Washington*, 384 F. Supp. at 351, 382; 10/13/09 Tr. 51.

In short, fishing was "not much less necessary to the existence of the Indians than the atmosphere they breathed." *United States v. Winans*, 198 U.S. 371, 381 (1905).

Island Tribe, Stillaguamish Tribe of Indians, Suquamish Indian Tribe, Swinomish Indian Tribal Community, Tulalip Tribes, and Upper Skagit Indian Tribe.

[2] The district court here incorporated many findings of fact from this 1974 decision (referred to as "Final Decision #1"). *E.g.*, Pet. App. 132a.

B. The United States Expressly Agreed To Preserve The Tribes' Right Of Taking Fish.

With the signing of the Oregon Treaty in 1846, American settlement of the Pacific Northwest began in earnest, and the United States sought to acquire land from the Indian Tribes. The Tribes' primary concern was preserving their fishery. That became the basis of a bargain whereby the Tribes ceded nearly all their lands but kept their "right of taking fish," "secured" by the treaty clause at issue here.

Congress first established the Oregon Territory in 1848, then separated out the Washington Territory in 1853. The territorial organic statutes began by preserving "the rights of person or property now pertaining to the Indians in [the combined] Territory." Act to establish the Territorial Government of Oregon, ch. 177, § 1, 9 Stat. 323 (1848). In addition, Congress safeguarded the fishery by forbidding any obstruction of "streams ... in which salmon are found" that did not "allow salmon to pass freely up and down." *Id.* § 12, 9 Stat. 328; Act to establish the Territorial Government of Washington, ch. 90, § 12, 10 Stat. 177 (1853).

Isaac Stevens became Washington's first territorial governor and Superintendent of Indian Affairs. Governor Stevens proceeded to negotiate a series of treaties with the Indian Tribes of the region (the "Treaties" or "Stevens Treaties").

A crucial element of each treaty negotiation was preserving the tribal fisheries. *Washington v. Wash. State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 677 (1979) (*Fishing Vessel*). During

the negotiation of the Treaty of Point-No-Point, for example, the Indians worried about "how they were to feed themselves once they ceded so much land," and one cautioned, "We may become destitute." J.A.128a. The Tribes were much more concerned about retaining their fishing rights than their land. *E.g.*, *Washington*, 384 F. Supp. at 363, *cited in Fishing Vessel*, 443 U.S. at 668. Many expressed views like the statement made by one Makah: "He was willing to sell his land: all he wanted was the right of fishing." Ex. MK-M-26, at 3, *United States v. Washington*, No. 9213 (W.D. Wash. Aug. 16, 1983) (transcribed minutes of Treaty of Neah Bay).

Governor Stevens convinced the Tribes to cede their lands by promising to preserve their existing fishing rights, both on and off their reservations, in perpetuity. The government negotiators recognized that doing so "was necessary for the Indians to obtain a subsistence." J.A.130a. The governor thus assured the Tribes that they would "not have simply food and drink now but that [they would] have them forever." Pet. App. 129a. Perhaps most plainly, he told one group of tribes:

> "Are you not my children and also children of the Great Father? What will I not do for my children, and what will you not for yours? ... This paper is such as a man would give to his children and I will tell you why. This paper gives you a home.... *This paper secures your fish.*

Fishing Vessel, 443 U.S. at 667 n.11 (emphasis added).

"[T]he governor's promises that the treaties would protect that source of food and commerce were

crucial in obtaining the Indians' assent." *Id.* at 676. And the governor made those promises purposefully. He was under strict instructions to contain the treaties' cost, and he recognized that Indians left destitute without their food source would require support from the public treasury. Pet. App. 177a; J.A.130a.

Governor Stevens's promises were embodied in the Treaties' fishing clauses. The Treaty of Medicine Creek provides:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with citizens of the Territory, and of erecting temporary houses for the purpose of curing ....

Art. III, 10 Stat. 1133 (Dec. 26, 1854). The corresponding language in the other treaties varies only slightly. *Fishing Vessel*, 443 U.S. at 674 n.21. The Tribes retained other rights, such as "hunting [and] gathering roots and berries," "on open and unclaimed lands." Art. III, 10 Stat. 1133. Some Tribes also expressly reserved the exclusive "right of taking fish" within the boundaries of their own reservations.[3]

In exchange, the Tribes agreed to cede "their right, title, and interest" to enormous portions of their "lands and country." Art. I, 10 Stat. 1132. They would thenceforth occupy only small reservations.

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[3] *E.g.*, Treaty with the Yakama, art. III, 12 Stat. 953 (June 9, 1855).

C. For a Century, This Court Has Interpreted The Fishing Clauses To Preserve Tribal Rights And Forbid Washington's Attempts To Violate Them.

By 1900, the development of canning sparked a boom in the salmon market. Soon non-Indian fishermen were forcing the Tribes away from their traditional fishing sites and catching enormous numbers of salmon, leaving little for the Tribes and damaging the fishery. Pet. App. 70a-71a. Washington began asserting its regulatory power in a discriminatory manner to prevent the Tribes from fishing. Wash. Br. 9 n.8. "As a result of the State's hostility to off-reservation fishing, the Indians' share of the overall catch was relatively small." Pet. App. 76a; *see id.* at 73a-76a.

This Court has held, repeatedly, that this pattern of conduct violated the Treaties, in several respects.

Fish Passage: When private landowners used a series of state-licensed "fish wheels" to intercept and capture nearly all passing salmon, this Court held that they impermissibly infringed the Tribes' right of taking fish. Non-Indians cannot take "exclusive possession of the fishing places," *Winans*, 198 U.S. at 382; the fish wheels impermissibly left no fish "available to Indian fishermen upstream." *Fishing Vessel*, 443 U.S. at 681 (explaining *Winans*).

This obligation to allow fish passage is reciprocal: even where Tribes have *exclusive* fishing rights (within the boundaries of their reservations), they cannot use that position to "interdict completely the migrating fish run." *Puyallup Tribe, Inc. v. Dep't of Game*, 433 U.S. 165, 176 (1977) *(Puyallup III)*.

Upstream fishing rights must be respected by Indians and non-Indians alike.

Access: When private landowners acquired property by the tribal fishing grounds, this Court held that the Tribes retain a continuing right of access to the river. *Winans*, 198 U.S. at 381. Private landowners "had notice of these Indian customary rights by the reservation of them in the treaty." *Seufert Bros. Co. v. United States*, 249 U.S. 194, 199 (1919).

Impermissible Conditions: When Washington forbade Indians from fishing unless they paid a state license fee, this Court held that "a fair construction of the treaty" would not permit the State to exact fees "as a prerequisite" to "exercising the very right [the Indians'] ancestors intended to reserve." *Tulee v. Washington*, 315 U.S. 681, 685 (1942).

Conservation, But No Discrimination: When Washington banned net fishing (in which only Indians engaged), but allowed recreational fishing ("entirely [taken over] by non-Indians"), for steelhead, this Court found impermissible "discrimination" against Indians. *Dep't of Game v. Puyallup Tribe*, 414 U.S. 44, 48 (1973) *(Puyallup II)*. The State had "grant[ed], in effect, the entire run to the [non-Indian] sports fishermen." *Id.* at 46-47. What the State *can* do is impose nondiscriminatory regulations "in the interest of conservation." *Puyallup Tribe v. Dep't of Game*, 391 U.S. 392, 398 (1968) *(Puyallup I)*.

Each of these holdings flowed from the Tribes' secured "right of taking fish," informed by the clear

understandings of that right communicated during the Treaties' negotiation.

D. The United States Files This Litigation To Protect The Fishery.

The *United States v. Washington* litigation has focused from the outset on ensuring that the Tribes' rights under the Treaties are not just an empty right of access, but an actual "right of taking fish." Washington has resisted that conclusion for decades.

The first phase involved interpreting the phrase "in common with all citizens of the Territory." Washington's Game Department contended that the Treaties gave the Tribes no allocation of the fishery, just an opportunity to go fishing, and allowed non-Indians to catch as many salmon as they could, even if the Tribes got none. In *Fishing Vessel*, this Court squarely rejected that argument. The Court concluded that the "right of taking fish" means more than "merely the 'opportunity' to try to catch" fish at particular locations. 443 U.S. at 678. The anadromous fishery is akin to a harvest, and "[b]oth sides have a right, secured by treaty, to take a fair share of the available fish" at those locations. *Id.* at 684-685.

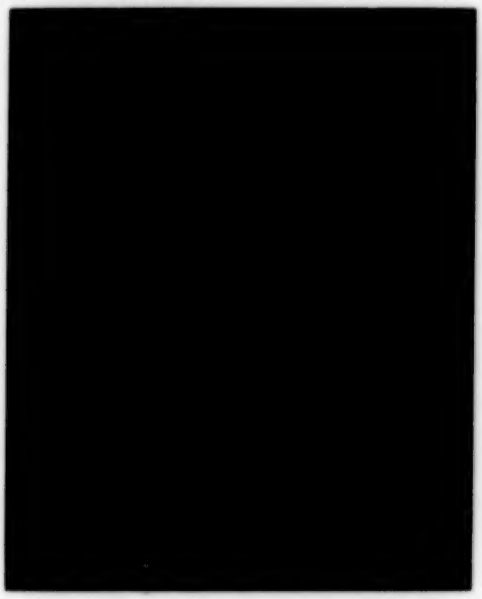
A fair share, the Court explained, starts with a 50/50 division between tribal and non-tribal fishing. 443 U.S. at 686. That tribal share represents "a maximum but not a minimum allocation"; the fishing clause secures to the Tribes "so much as, but no more than, is necessary to provide the Indians with a livelihood—that is to say, a moderate living." *Id.*

E. The State's Barrier Culverts Block Fish Passage And Threaten The Fishery.

This litigation addresses a specific threat to the salmon fishery. Many of the tributaries in the relevant watersheds are now obstructed by roadways built across streambeds. In many places, the stream passes under the roadway through a manmade culvert, and a large number of these culverts are impassable to fish—preventing salmon from migrating to the ocean and returning, as they must to reproduce. By stipulation, this case focuses exclusively on those "barrier culverts"—culverts that prevent fish from passing. Pet. App. 159a, 173a.

The State itself has recognized that its barrier culverts "obstruct habitat" and contribute to significant declines in the salmon population. 1997 Wash. Sess. Laws 2356; *see* Pet. App. 147a. State reports have repeatedly acknowledged that "a serious problem to salmonid production in Washington is impassable road culverts. In numerous cases, miles of productive freshwater anadromous fish habitat have been blocked from anadromous fish by a single barrier road culvert." J.A.612a; *see also* J.A.427a-428a ("Fish passage at human made barriers such as road culverts is one of the most recurrent and correctable obstacles to health salmonid stocks in Washington."); J.A.602a, J.A.622a.

Poorly designed or maintained culverts can block fish passage in many ways. For example, a badly designed culvert can end up significantly higher than the eroding streambed:



J.A.532a, 662a (culvert on Nooksack River tributary). Salmon can jump, but they cannot fly. Culverts like this turn into one-way streets. Pet. App. 161a.

Other design flaws also create culvert barriers. For instance, if a culvert is too narrow or too smooth, the water is forced through too fast for fish to pass upstream. J.A.648a. Deficient culverts can also become clogged with debris. Pet. App. 161a; J.A.646a-647a.

When a barrier culvert cuts off the upstream portion of the stream from the ocean, the salmon cannot return to the upstream watershed to

reproduce. The result can be the extirpation of an entire local salmon population. Pet. App. 160a-161a; J.A.405a-406a, 407a-408a. Salmon encountering a blockage do not just turn around and find new homes elsewhere; they keep trying in vain to get up that stream until they die, like the stranded fish here:

J.A.240a.

As of the trial, the State was responsible for *hundreds* of barrier culverts blocking "significant habitat" throughout western Washington—more than any other single landowner. Pet. App. 162a. Many interpose a blockage between "usual and accustomed" tribal fishing grounds and the ocean. Thus, state-owned barrier culverts prevent anadromous fish from reaching places where the Tribes expressly reserved the right to take those fish. Take, for example, the culvert depicted above from the Nooksack River system, which blocks fish from

reaching usual and accustomed fishing grounds of the Nooksack Tribe. *United States v. Washington*, 459 F. Supp. 1020, 1049 (W.D. Wash. 1978); *see, e.g.*, *Washington*, 384 F. Supp. at 359, 367, 368, 372 (finding that many tributaries and "uppermost reaches" were usual and accustomed fishing places).

J.A.288a-289a.

These "State-owned barrier culverts are so numerous and affect such a large area that they have had a significant total impact on salmon production." Pet. App. 162a; *see id.* at 160-162a, 176a. To take just one example, the district court found that when population decline on tributaries was analyzed in the Skagit River watershed (the largest tributary of Puget Sound), ***44 to 58%*** of the loss of salmon production was attributable to barrier culverts. *Id.* at 161a. Throughout the area subject to the Treaties, salmon are in decline; many stocks "are depressed, in danger of extinction, or already extinct." *Id.* at 136a.

Conversely, *removing* a barrier culvert is one of the most productive and immediately effective measures to support the fish population. Usually barrier removal results in "rapid response by colonizing salmon," J.A.402a, 422a-425a, often "within weeks of restoring access," C.A.S.E.R.18. As the district court observed in a colloquy with an expert, repairing culverts provides "the biggest bang for [the] buck" of any restoration measure. J.A.689a.

F. The District Court Formulates Targeted Equitable Relief, And The Court of Appeals Affirms.

The United States and the Tribes brought this proceeding to compel Washington to remedy the problem effectively, after a mediation made clear that Washington would not do so voluntarily. J.A.42a-43a. The district court found that the State was on pace to take "more than 100 years" to correct its blocking culverts. Pet. App. 160a-161a, 163a.

1. Washington initially pointed the finger at the United States. Contending that the State's culvert designs complied with federal guidance and accordingly "satisfied any treaty obligation," J.A.78a, Washington asserted "waiver and/or estoppel." J.A.86a-87a. The district court struck those defenses, because they cannot be asserted against the United States. Pet. App. 274-275a.

2. After extensive fact-development, the parties cross-moved for summary judgment on liability. By stipulation, they limited the case to "only those culverts that block fish passage," and only "under State-owned roads." Pet. App. 253a. The district court concluded that Washington had violated the Treaties. *Id.* at 249a-271a.

Washington did not deny that many of its culverts blocked fish passage, Pet. App. 255a, and the Tribes "produced evidence of greatly diminished fish runs." *Id.* at 256a. Because "culverts block fish passage so that they cannot swim upstream to spawn, or downstream to reach the ocean, those blocked culverts [we]re responsible for some portion of the diminishment." *Id.*

The only remaining question was whether the Treaties forbid such blockages. Washington insisted that they do not. The district court, however, identified "a narrow directive to refrain from impeding fish runs" by "building or maintaining culverts [so] as to block the passage of fish upstream or down, to or from the Tribes' usual and accustomed fishing places." Pet. App. 271a; *accord id.* at 263a-264a. The court grounded that holding in the promise that the Treaties would protect the fishery and would not allow "actions that would significantly

degrade the resource." *Id.* at 264a, 270a. The court specifically held that it was *not* creating an affirmative duty to protect fish runs, but merely a duty to refrain from blocking them "in one specific manner." *Id.* at 271a.

3. The parties proceeded to a seven-day trial on remedy. Washington refused the district court's invitation to propose appropriate terms. Instead, Washington took the position that the Treaty violation warranted *no* equitable relief, except perhaps monitoring what the State was already doing.

The district court adopted a tailored injunction, giving Washington considerable flexibility. The court allowed the State to defer correction of nearly half of the roughly 1,000 barrier culverts subject to the injunction. Pet. App. 238a; J.A.225a-226a, 758a. First, Washington may defer correction of any culvert that would result in less than 200 lineal meters of habitat gain, until the culvert reaches the end of its useful life or is part of a highway construction project. Pet. App. 237a-238a. Second, Washington may defer correction of some of the remaining 817 barrier culverts, totaling up to 10% of the potential habitat gain, for any reason. *Id.* at 238a. That alone will exempt a substantial number of culverts—up to 25% of the total. *See id.* at 114a; C.A.E.R.220-232.

The Court found that the best technical solution was one developed by Washington agencies, called "stream simulation." Pet. App. 137a-138a. That design (which uses a wider culvert with a simulated streambed inside) offers superior fish passage and habitat benefits. *Id.* It costs little more than the

alternative culvert model once the decision to install a new culvert has been made. *Id.* at 151a; C.A.S.E.R.204-205, 210-211. And it is cost-effective in the long term, because stream-simulation culverts are less likely to become barriers again. Washington itself prefers stream simulation or bridges. Pet. App. 170a-171a.

The court gave careful consideration to the impact on the State's transportation budget (which under the state constitution is segregated from other budget items, Pet. App. 172a), and it allowed the State to defer costs over many years. In the process, the court rejected Washington's cost estimate of $2.3 million per culvert. *Id.* at 170a. The court also noted that many culvert-replacement projects have been undertaken as part of other highway-improvement projects (*id.* at 171a), allowing certain costs to be spread. J.A.614a.

Ultimately, the court determined, "State-owned barrier culverts are so numerous and affect such a large area that they have a significant total impact on salmon production." Pet. App. 162a. The district court thus concluded that equitable relief is warranted to alleviate that impact. *Id.* at 176a-179a. The State did not seek to stay the injunction.

4. The court of appeals affirmed. Pet. App. 68a-126a. Rejecting the State's position that the right of taking fish is satisfied even if the State destroys the fishery, the court relied on Governor Stevens's promises "that 'this paper secures your fish,' and that there would be food 'forever.'" *Id.* at 92a. The court held that the Tribes could not have understood there to be "a qualification that would allow the

government to diminish or destroy the fish runs." *Id.* at 91a.

In the alternative, the court observed that it would have reached the same result even without Governor Stevens's express promises. The court reasoned that just as establishing an Indian reservation can by implication promise enough water to irrigate it, the Stevens Treaties intended to secure the fishery. Pet. App. 94a.

Separately, the court rejected Washington's attempt to revive its equitable defense, and held that the particular terms of the injunction were not an abuse of discretion. Pet. App. 96a-99a, 104a-126a.

5. Washington sought rehearing, which was denied. Senior Judge O'Scannlain submitted a statement respecting the denial of rehearing. Pet. App. 17a-41a. The circuit judges on the panel concurred in the denial, *id.* at 6a-17a, explaining that they had "h[e]ld only that the State violated the Treaties when it acted affirmatively to build roads across salmon bearing streams, with culverts that allowed passage of water but not passage of salmon." *Id.* at 10a-11a. The panel members disclaimed any holding that the Treaties protect the Tribes' moderate living "against all State-caused diminutions." *Id.* at 10a.

SUMMARY OF ARGUMENT

I. Washington's barrier culverts violate the Treaties for two reasons. First, blocking the waterways prevents salmon and other anadromous fish from reaching, or returning to, upstream areas where the Tribes have the express right to take fish.

Second, cutting off anadromous fish from large portions of the habitat where they reproduce and their young grow causes a substantial degradation of the fishery, which undermines the right of taking fish at all Treaty-protected grounds, both upstream and downstream. Either ground requires affirmance here. While Washington criticizes aspects of the court of appeals' reasoning, it never confronts the basis for the judgment of liability: the widespread blockage of fish passage violates the Tribes' "right of taking fish."

A. The Treaties "secure" the Tribes' "right of taking fish." The text, negotiating history, and legal backdrop of the Treaties all confirm that the secured right protects the Tribes' fishery, not just the opportunity to "dip their nets" into empty waters. *Fishing Vessel*, 443 U.S. at 679.

For centuries, "taking fish" has meant actually capturing fish, and the Treaties reflect that ordinary meaning. The right of taking fish is no longer "secured" when the Tribes are deprived of their fishery. The context and negotiating history of the Treaties confirm that point: the Tribes were intensely focused on whether they could continue to support themselves by fishing, and Governor Stevens assured them that they would, promising, "This paper secures your fish." *Fishing Vessel*, 443 U.S. at 667 n.11.

For those reasons, in *Winans*, this Court construed the Treaties to require removal of fish wheels that took all the salmon from a river, preventing fish from passing upstream to tribal fishing grounds. The only difference here is that Washington's culverts do not even harvest the fish, but strand them to die.

Background common-law principles further inform "the right of taking fish" and confirm that the Treaties forbid significant degradation of the fishery. Treaties are imbued with a guarantee of good faith between the contracting sovereigns; based on that guarantee, such agreements are construed to protect the basis of the bargain, rather than to give one party the power to destroy it. At common law, an interest in a fishery included an enforceable right to protect it from blockage or substantial degradation. The sovereign rights secured to the Tribes should not be construed to be any less robust.

B. So understood, the Treaties clearly prohibit Washington's widespread blockages. The State's barrier culverts prevent fish from reaching "usual and accustomed" places where the Tribes have a right to fish. That sort of direct interference with fish passage has been actionable for centuries. And Washington itself has acknowledged the blockages' profoundly deleterious consequences for the salmon population. Entire runs have already been extirpated. The district court therefore correctly determined that Washington had violated the Treaties.

C. Washington focuses on the court of appeals' invocation of the concept of a "moderate living," which this Court explained in *Fishing Vessel* is a *limit* on the Treaties' protection of the Tribes' fishery. But that concept is not the basis of the Tribes' claim here, of the liability decision, or of the injunction. It is undisputed that the Tribes are not earning a moderate living from the fishery, but this litigation does not seek to provide them with one.

Instead it seeks to remedy the State's invasion of the Tribes' "right of taking fish."

D. Washington no longer defends the proposition that it can block every salmon-bearing tributary of Puget Sound without implicating the Treaties. But because of the barrier culverts' widespread and direct interference with the fishery, Washington cannot identify any conception of "the right of taking fish" that would protect the fishery from destruction and yet leave Washington's barriers untouched.

II. Washington's assertion of "waiver and/or estoppel" against the United States provides no basis for reversal. Such defenses may not be invoked against the sovereign, and they certainly may not be invoked on the basis Washington proposes. The United States did not compel Washington to adopt culvert designs that were impassable to salmon. Nor did the United States assure the State that it was in compliance with the Treaties. Instead, Washington complains that the United States did nothing to stop the State from violating the Treaties. That is no equitable defense at all.

III. The remedy the district court imposed was well within its equitable discretion. Washington does not even mention the abuse-of-discretion standard, and it mounts a handful of fact-specific criticisms of the injunction that should have been aired in the district court. Washington refused to participate in crafting the injunction and its belated pursuit of these fact-bound issues is inappropriate here.

ARGUMENT

Barrier culverts cut off salmon from places where the Tribes have the right to take fish. They also prevent salmon from returning from the ocean to reproduce, substantially degrading the tribal fishery. For both reasons, the district court correctly held that Washington has violated the Treaties. And the court properly exercised its discretion to remedy that violation through an order that gives the State both time and flexibility to fix the problem.

I. Washington's Barrier Culverts Violate The Treaties By Blocking Fish Passage To Tribal Fishing Grounds And Substantially Degrading The Fishery.

It is undisputed that barrier culverts constructed and maintained by the State block salmon from passing upstream to their spawning and rearing grounds, and the district court held it was "inescapable" that such blockages "substantially diminish[]" fish harvests in the Tribes' traditional fishing grounds. Pet. App. 256a, 263a. The district court thus recognized that the State's liability turns on whether the Treaties impose *any* obligation on the State not to block fish passage or otherwise degrade the fishery. *Id.* at 256a, 270a-271a.

Below, Washington took the remarkable position that the answer is no—that the State "could block every salmon-bearing stream feeding into Puget Sound" without even *implicating* the Tribes' treaty "right of taking fish." Pet. App. 87a-88a. The State now disavows that extreme interpretation (Wash. Br. 2, 41-42) and concedes that the Treaties protect the fishery after all. But it cannot explain why

conceding that point does not concede the case, given the undisputed evidence that supports the liability judgment.

Instead, the State devotes its brief *entirely* to challenging the Ninth Circuit's supposed recognition of a "new right" for the Tribes to demand a "moderate living" from fishing. *See* Wash. Br. 1-2, 27-29, 30-45. It is undisputed that the Tribes are *not* earning a moderate living from the fishery, *see* Part I.C, *infra*, but that is not the basis of the Tribes' claim. Indeed, the circuit judges on the panel rejected Washington's reading of their decision, explaining that the panel did "not hold that the Tribes are entitled to enough salmon to provide a moderate living, irrespective of the circumstances"; rather, the State is liable under the Treaties because it "acted affirmatively to build ... barrier culverts that block the passage of salmon, with the consequence of substantially diminishing the supply of harvestable salmon." Pet. App. 10a.

In any event, Washington's critiques of the Ninth Circuit's *opinion* provide no basis to reverse the *judgment*. The judgment is what this Court reviews, *e.g.*, *Camreta v. Greene*, 563 U.S. 692, 704 (2011), but Washington does not even address it. This Court should affirm that judgment because the State has invaded the "right of taking fish" "secured" by the Treaties by blocking fish passage to tribal fishing grounds and significantly degrading the fishery.

A. The "Right of Taking Fish" "Secured" By The Treaties Protects The Fishery Itself.

1. "In interpreting treaties," the Court "begin[s] with the text ... and the context in which the written words are used." *Water Splash, Inc. v. Menon*, 137 S. Ct. 1504, 1508-1509 (2017) (citation omitted). Here, the text of the Treaties directly supports the Tribes' claim against the State for installing and maintaining barriers to fish passage. The Treaties provide that:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory.

Art. III, 10 Stat. 1133. Several key terms inform the scope of this clause and make clear that it protects the Tribes' fishery, not just their physical access to fishing places.

First, the Treaties do not convey fishing rights to the Tribes, but rather "secure" rights that the Tribes already possessed, making those rights "certain" or "beyond hazard." 2 Noah Webster, *American Dictionary of the English Language* 66e (1828) (*Webster's Dictionary*) (defining "secure"). Use of the term "secure" reflects the fact that the Treaties did not "grant ... rights to the Indians," but instead conveyed "right[s] *from them*" to the United States. *Winans*, 198 U.S. at 381 (emphasis added).

Second, the right secured is the Tribes' ability to "tak[e] fish," *i.e.*, to "get [them] into [their] power." 2 *Webster's Dictionary* 88h (giving the example "to *take* fishes with nets, or with hook and line"); *see also Babbitt v. Sweet Home Chapter, Communities for*

Great Or., 515 U.S. 687, 717 (1995) (Scalia, J., dissenting) (noting this usage of "take" is "as old as the law itself"); 2 William Blackstone, *Commentaries on the Laws of England* 411 (1769) (describing the right of "pursuing, and taking" wild animals). This right of taking fish necessarily preserved the Tribes' ability to actually harvest fish, not merely to access an empty fishery. As this Court explained, "[b]ecause the Indians had always exercised the right to meet their subsistence and commercial needs by taking fish from treaty area waters, they would be unlikely to perceive a 'reservation' of that right as merely the chance ... occasionally to dip their nets into the territorial waters." *Fishing Vessel*, 443 U.S. at 678-679.[4]

Third, the secured right of taking fish extends to "all" of the Tribes' "usual and accustomed grounds and stations." Thus, each Tribe's members may take fish only from the waters that comprised usual and accustomed grounds and stations at Treaty time, but may not be deprived of their right of taking fish at any of those grounds and stations.

Taken together, these aspects of the text demonstrate that the Tribes retained not just a right of access, but a right actually to capture fish. Depriving the Tribes of any fish to take, but instead allowing them access to an empty river, would not comply with the Treaties.

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[4] Washington pays little attention to the text. One amicus brief acknowledges the accepted meaning of "take," but then advances an interpretation irreconcilable with it, based on the unsupported argument that because the right of taking fish is carried out at particular places, it must be limited to a right to access those places. Business Br. 7.

2. For more than a century, this Court has read the fishing clause to secure important and judicially enforceable protection for the Tribes' right to take fish. Those prior interpretations are entitled to great weight, because *stare decisis* is especially powerful in the treaty context given the important reliance interests at stake. *See Clark v. Allen*, 331 U.S. 503, 516 (1947).

In *Winans*, for example, the Court addressed whether non-Indians holding title to lands adjacent to the fishery could use state-licensed "fish wheels"—"device[s] capable of catching salmon by the ton and totally destroying a run of fish," *Fishing Vessel*, 443 U.S. at 679—to block tribal members from taking fish. *See Winans*, 198 U.S. at 382. The United States argued that under the applicable treaty, the Tribe had retained a "servitude" over its traditional fishing grounds, requiring the United States and its successors to "preserve" the fishery for the Tribe and ensure that tribal fishermen could both access the grounds and take fish. U.S. Br. at 51, 54, *Winans*, *supra* (O.T. 1904, No. 180). This Court agreed, holding that the Treaty "imposed a servitude" and prohibited non-Indians from using devices such as fish wheels to secure "exclusive possession of the fishing places." 198 U.S. at 381-382. The Court remanded for a remedy in accordance with the Solicitor General's suggestion that the fish wheels be removed or their operation heavily curtailed, allowing fish to escape upstream for tribal fishing. *Id.* at 384; *see also Fishing Vessel*, 443 U.S. at 681 (discussing *Winans*); U.S. Br. at 54-55, *Winans*, *supra*.

Washington and its *amici* contend that *Winans* established only that Tribes have a right of "access to traditional fishing places." Wash. Br. 30; *see, e.g.*, Business Br. 7-18. But that narrow reading does not fit with the Treaties' text or the Court's reasoning. The Treaties secure the right of *taking* fish; restrictions on access are impermissible because they interfere with that right, not because the Tribes have a separate right to go and look at the water. And just as land-based obstructions prevent the Tribes from taking fish at their usual and accustomed fishing grounds, so too do water-based obstructions that block the fish from reaching those grounds. The remand order in *Winans* illustrates this point, as the Court recognized that the fish wheels infringed the Tribe's treaty rights not only by blocking its members from fishing, but also by preventing fish from passing upstream to the Tribes' usual and accustomed grounds. 198 U.S. at 384.

Fishing Vessel confirms this understanding of *Winans* and the Treaties, as this Court rejected Washington's argument that the Treaties provide the Tribes only an "equal opportunity" to fish in the treaty waters. 443 U.S. at 679. Instead, the Court held that the treaty language unambiguously "secure[d] the Indians' right to take a share of each run of fish that passes through tribal fishing areas." *Id.* And the Court made clear that it would violate the Tribes' "right of taking fish" in common with non-Indians to let non-Indians engage in fishing practices that would leave the Tribes with "virtually no catch at all." *Id.* at 676 n.22. The same reasoning applies here: the Tribes cannot "take" fish from empty waters, whether they are empty because of

overharvesting by non-Indians or impediments installed by the State.

3. The Treaties' negotiating history leaves no doubt. To secure the Tribes' agreement, the United States expressly represented that the Treaties would protect their fishery. If the Treaties allowed the Tribes' fishing rights to be undermined as Washington has done here, those assurances would have been worthless. That is not how this Court construes an agreement between sovereigns.

a. "A treaty is in its nature a contract between ... nations" rather than an ordinary "legislative act." *Lozano v. Montoya Alvarez*, 134 S. Ct. 1224, 1232-1233, (2014) (quoting *Foster v. Neilson*, 27 U.S. (2 Pet.) 253, 314 (1829) (Marshall, C.J.)). Thus, the Court (even Members skeptical of legislative history in construing statutes) regularly considers the context of a treaty's negotiation and adoption, to promote interpretations "consistent with the shared expectations of the contracting parties." *Olympic Airways v. Husain*, 540 U.S. 644, 650 (2004) (citation omitted); *id.* at 660 (Scalia, J., dissenting) (agreeing with this principle); *accord Medellin v. Texas*, 552 U.S. 491, 507 (2008). Particularly where (as here) the parties to a treaty did not share a common language or legal heritage, the Court often looks to the treaty's "negotiating history" to supplement its textual analysis. *Air France v. Saks*, 470 U.S. 392, 400 (1985).

This Court applies this basic approach when interpreting treaties between the United States and Indian tribes, but with a special refinement: "Indian treaties are to be interpreted liberally in favor of the Indians." *Minnesota v. Mille Lacs Band of Chippewa*

Indians, 526 U.S. 172, 200 (1999). In doing so, the Court aims to give "effect to the terms" of a treaty "as the Indians themselves would have understood them." *Id.* at 196. This rule derives from "the unique trust relationship between the United States and the Indians," *County of Oneida v. Oneida Indian Nation*, 470 U.S. 226, 247 (1985), as well as the American negotiators' "superior knowledge of the language in which the treaty is recorded," *Fishing Vessel*, 443 U.S. at 676; *see id.* at 667 n.10 (noting severe translation difficulties in the negotiation). And because the rule long predates these Treaties, *see Worcester v. Georgia*, 31 U.S. (6 Pet.) 515, 552-553 (1832) (Marshall, C.J.); *id.* at 582 (M'Lean, J., concurring), it provided the legal backdrop against which the President and Senate acted when signing and consenting to the Treaties.

b. Here, the historical evidence shows unequivocally that the Tribes entered into the Treaties because they understood that their ability to harvest fish at their usual and accustomed grounds and stations would be "secured" and respected by the United States. Governor Stevens explicitly assured them of it.

All the Tribes "shared a vital and unifying dependence on anadromous fish." *Fishing Vessel*, 443 U.S. at 664-665 & n.6; *see* pp. 3-4, *supra*. The Tribes thus feared that relinquishing so much land would leave them unable to sustain themselves by fishing. The United States assured them that their fishing rights would be protected. As Governor Stevens pledged to one group of Tribes, "This paper secures your fish." *Fishing Vessel*, 443 U.S. at 667 n.11. Governor Stevens likewise promised another

Tribe that entering into the treaty would ensure that they would simply have" food and drink now but that [they] may have them forever." J.A.132a; *see* Pet. App. 129a, 177a. And Governor Stevens and his advisors *wanted* to preserve the Tribes' "continued exploitation of their accustomed fisheries"; they had instructions to keep the Treaties' costs down by ensuring that the Tribes could meet their own needs. *Fishing Vessel*, 443 U.S. at 666 & n.9; *see also* Pet. App. 266a-269a; J.A.127a-130a.

In short, "the Tribes were personally assured during the negotiations that they could safely give up vast quantities of land" and still "be certain that their right to take fish" and sustain their societies "was secure." Pet. App. 270a. Those assurances amply support construing the fishing clause to protect against "actions that would significantly degrade the resource." *Id.*

4. Washington's reading of the Treaties is also unsustainable because it allows the frustration of one of the central subjects on which the parties agreed: to secure a "right of taking fish" that would help sustain the Tribes even after their relocation to reservations.

As contracts between sovereigns, the Treaties incorporate the background rule that each sovereign is bound by a mutual obligation of "good faith." 2 Emer de Vattel, *The Law of Nations* § 280, at 251 (Joseph Chitty ed. 1883) (1758) ("[A]s good faith ought to preside in conventions, they are always interpreted on the supposition that it actually did preside in them."). The Court has long applied this principle in interpreting Indian treaties, as it also follows from the "duty of protection" the United

States owes to Indian Tribes as the discovering sovereign of previously inhabited lands. *Worcester*, 31 U.S. (6 Pet.) at 552 ("Protection does not imply the destruction of the protected."); *see also United States v. Payne*, 264 U.S. 446, 448 (1924) (recognizing that the United States was "bound by every moral and equitable consideration to discharge its trust" pursuant to the treaty "with good faith and fairness"). The obligation of good faith precludes reading a treaty so as to let one party deprive the other of the benefit of its bargain. Rather, a treaty must be "interpreted in such a manner as that it may have its effect, and not prove vain and nugatory." *De Geofroy v. Riggs*, 133 U.S. 258, 270 (1890) (quoting 2 Vattel § 283, at 253).

Good faith does not allow the United States (or a State) to interfere with the Tribes' secured right of taking fish. The Tribes ceded their lands only after securing their fishery. No good-faith reading would allow the United States, or a State, to destroy that fishery. *See* 2 Horace Smith & C.G. Addison, *Addison on Contracts* 576-577 (8th ed. 1883) (*Addison*) (to enforce "good faith," the grant of an estate, interest, or incorporeal property right such as a watercourse carries an implied but enforceable promise that the grantor will "do nothing to annul or avoid such [a] grant" such as "stopp[ing] up the watercourse"); *Amidon v. Harris*, 113 Mass. 59, 64-65 (1873) (recognizing the "well established" rule that one who grants a right "will do no act to interfere with, prevent or diminish the full enjoyment of the right granted").

In fact, in the reciprocal context, this Court has already recognized that the Treaties should not be

read to authorize actions that could undermine the common fishing rights of Indians and non-Indians. In *Puyallup III*, this Court held that a Tribe could not exercise on-reservation fishing rights to "interdict completely the migrating fish run" and thus "completely destroy" the shared fishing resource. 433 U.S. at 176 & n.15. As the Court explained, the Treaties did not provide the Tribe with a right to take actions on its own land that would "totally frustrate ... the [fishing] rights of the non-Indian citizens of Washington recognized in the Treaty." *Id.* at 176. There is no principled reason not to apply this rule reciprocally. *See Fishing Vessel*, 443 U.S. at 684-685.

Likewise, this Court has construed other agreements between the United States and Indian Tribes to ensure that the Tribes can actually exercise the rights that they retain. In *Winters v. United States*, 207 U.S. 564 (1908), the Court held that an agreement creating a reservation should be interpreted to retain water rights that were needed to make the reservation a viable home for the Tribe, *id.* at 576-577. As the Court explained, the agreement should be construed to "support the purpose" rather than "defeat it" by leaving the Indians with "valueless" arid land. *Id.*

The reasoning of *Winters* fully applies here; indeed, this case is more compelling. In *Winters*, the Court concluded that reserved water rights were *implicit* in the parties' agreement. Here, the Treaties *expressly* secure the Tribes' "right of taking fish." Protecting the fishery from obstructions and significant

degradations follows directly from the reserved right.[5]

5. The common-law foundation of the relevant Treaty terms confirms that the Tribes' "right of taking fish" includes protection against substantial interference with that right, especially barriers to fish passage. *See United States v. Arredondo*, 31 U.S. 691, 743 (1832) (relying on a "settled principle of the common law" in construing a treaty). As sovereign treaty partners, the Tribes should receive no *less* protection for their fishing right than the common law provided to private individuals. *See Winans*, 198 U.S. at 380.

a. At common law, impediments to "the passage of fish up the river by means of dams or other obstructions" were considered "a nuisance." 3 James Kent, *Commentaries on American Law* 411 (4th ed. 1841). Indeed, barriers to fish passage were "reprobated in the earliest periods of our law," back to Magna Carta. *Weld v. Hornby* (1806) 103 Eng. Rep. 75, 76, 7 East 196, 198 (K.B.).

Weld, a leading English case, sustained an action for nuisance to eliminate an obstacle to fish passage. The defendant had replaced a permeable brushwood weir with a stone weir, blocking salmon passage upstream and wrongfully preventing the plaintiff from taking fish. *Id.* at 75-76, 196-197; *see* John M. Gould, *Treatise on the Law of Waters* § 187, at 328

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[5] The State insists (at 39-40) that *Winters* should be limited to its facts, *i.e.*, the reservation of water rights for lands. That arbitrary distinction ignores that this Court relied on *Winters* and its progeny in *Fishing Vessel*, 443 U.S. at 684, 686, and *Winters* itself relied on the interpretation of the Treaties in *Winans*, 207 U.S. at 577.

(1883) (discussing *Weld* and other similar cases from England and Ireland); *Earl of Kintore v. Pirie* (1906) UKHL 838, 839, 43 Scottish L. Rep. 838, 839 (Lord Davey) (affirming the right of fishery owners to bring an action based on diversion of the watercourse, and holding "that no interference shall be made which materially obstructs the passage of fish").

American courts and state legislatures embraced this common-law rule, recognizing that riparian owners could not use their land "so as to injure the private rights of others" and in particular could not "impede the passage of fish up the river by means of dams or other obstructions." Joseph K. Angell, *A Treatise on the Law of Watercourses* § 85, at 83 (7th ed. 1854). For example, the Supreme Judicial Court of Massachusetts explained that the "ancient common law" doctrine articulated in cases like *Weld* bars riparian owners from "hinder[ing] the passing" of fish upstream. *Commonwealth v. Chapin*, 22 Mass. (5 Pick.) 199, 207 (1827). Other American courts likewise recognized that the "free passage" of fish "is secured by the common law." *Parker v. People*, 111 Ill. 581, 592-595 (1884) (collecting decisions). Reviewing one of those state decisions, this Court recognized that blocking fish passage harms "[f]ish rights below" the obstruction as well as those above, because fish blocked from migrating upstream "will soon cease to frequent the stream at all." *Holyoke Co. v. Lyman*, 82 U.S. 500, 519 (1872).

Thus, at the time the Treaties were adopted, it was generally accepted in this country that "[t]he owner of a fishery ha[d] a right to have the fish come to his fishery in the ordinary course of nature, and any person doing any act which may interfere with such

right may be restrained." Stuart A. Moore & Hubert S. Moore, *The History and Law of Fisheries* 168 (1903) (*Law of Fisheries*). And Congress had specifically adopted a fish-passage requirement for the Territory. *See* p. 5, *supra*.

The tribal fishing rights here are protected property rights, *Menominee Tribe v. United States*, 391 U.S. 404, 413 (1968), as well as "the supreme Law of the Land," U.S. Const. Art. VI, cl. 2. But under Washington's approach, they would nevertheless be entitled to *less* protection than both the common law and Territorial law provided to private individuals. "This [would] certainly [be] an impotent outcome to negotiations and a convention, which seemed to promise more and give the word of the Nation for more." *Winans*, 198 U.S. at 380.

b. The scope of the rights secured by the Treaties is also informed by the nature of the property interest that the Tribes retained, which this Court called a "servitude." *Winans*, 198 U.S. at 381. The common-law analogue was a "*profit à prendre*" (also known as a "right of common"), a legal interest "in the land of another," including "to catch fish." 2 Blackstone 32; *see id.* at 34 (the "[c]ommon of *piscary*" provides "a liberty of fishing in another man's water").

At common law, the owner of a *profit à prendre* could not only "bring an action for trespass," but also "maintain an action ... for nuisance" based on a material disruption to the fishery. *Fitzgerald v. Firbank*, (1897) 2 Ch 96, 101-102 (Lindley, L.J.). For example, in *Fitzgerald*, the Court of Appeal held that the owner of a *profit à prendre* could bring an action for nuisance against a railway contractor who had

discharged clay and gravel into the fishery. The discharge not only drove away fish but also damaged their spawning beds, preventing the plaintiff from "exercising" his right "to take away fish." *Id.* at 97, 100-102 (Lindley, L.J.); *id.* at 102-03 (Lopes, L.J.); *id.* at 103-104 (Rigby, L.J.); *see also Law of Fisheries* 167 ("An action will lie for the disturbance of a fishery ... and an injunction may be granted[.]").

Accordingly, the common-law backdrop of the Treaties confirms that the Tribes' "right of taking fish ... in common with" non-Indians, protects more than access to the fishery or even a fair share of the harvest—it protects against actions that "tend[] to destroy a private right of fishing" by "irreparabl[y]" damaging the fishery. Gould §§ 184-185, at 327.

6. The State insists (at 34-35) that the Treaties should be read not to protect the fishery because the parties (incorrectly) assumed that the supply of salmon was "inexhaustible." But both parties plainly understood that obstructions to fish passage were antithetical to a right of taking fish.

When Congress created the Oregon and Washington Territories, shortly before Governor Stevens negotiated the Treaties, it reaffirmed the longstanding common-law rule by barring any obstruction in salmon-bearing streams unless salmon could "pass freely up and down." *See* p. 5, *supra*. The author of that language explained that "there was now a valuable fishery in Oregon, and unless some care was taken of it, it would be lost. For the want of care, by the erection of a dam, &c., in the Connecticut river, the salmon, which formerly had been very valuable there, had been driven out." Cong. Globe, 30th Cong., 1st Sess. 1020 (Aug. 1,

1848) (Rep. Grinnell). That fate "might be avoided in this Territory, with care, without expense," by preserving fish passage. *Id.*

The Tribes likewise recognized that disruptions to salmon migration would threaten their fishery and, thus, their livelihood. J.A.140a-144a. Indeed, "[a] theme in local Indian mythology" of the time concerned "a period in the past in which malevolent individuals blocked streams to prevent the salmon coming up." J.A. at 372-373, *Fishing Vessel, supra* (from the report of Barbara Lane, Ph.D., exhibit USA-20); *see also* J.A.141a-142a (expert testimony describing tribal mythology that promised "swift retribution" to those who blocked salmon passage). The Tribes themselves regularly removed impediments to salmon migration in order to keep the fishery healthy. For example, the Tribes sometimes harvested fish using weirs, which "could easily kill all of the migrating fish" if left in place. J.A.142a. But the Tribes avoided degrading the fishery by keeping weirs clean and "periodically lift[ing] [them] to permit migrating fish to move upstream." *Id.*

Every aspect of the text and context confirm that the United States and the Tribes agreed to protect the fishery as the Indians' "source of food and commerce." *Fishing Vessel*, 443 U.S. at 676. The Treaties cannot be read to permit the fishery's destruction.

B. The District Court Correctly Found The State In Violation Of The Treaties.

The State is bound to follow the Treaties, which are "the supreme Law of the Land." U.S. Const. Art. VI,

cl. 2. The United States had unquestioned authority, "while it held the country as a territory, to create rights which would be binding on the States." *Winans*, 198 U.S. at 381-383. Yet the State has violated the Treaties by installing and maintaining barrier culverts that block salmon from passing upstream to the Tribes' usual and accustomed fishing grounds. In addition, the barrier culverts have violated the Treaties by preventing salmon from reaching their spawning grounds, resulting in significant degradation to the fishery. Each of these direct interferences with the Tribes' fishing rights provides ample basis to affirm.

1. The State objects (at 43-45) that the court of appeals supposedly applied "ill-defined" standards in affirming the liability judgment. But Washington's violation of the Treaties is straightforward. This is a fish-blockage case involving the sort of direct impediment to fish passage that common-law courts have redressed for centuries. *See* pp. 34-36, *supra*. As the district court noted, "[t]he State does not dispute the fact that a certain number of culverts under State-owned roads present barriers to fish migration." Pet. App. 255a. In fact, by stipulation, this proceeding includes "*only* those culverts that block fish passage under State-owned roads." *Id.* at 253a, 260a (emphasis added).

The district court found that, as of trial, state barrier culverts blocked approximately 1,000 miles of upstream salmon habitat. Pet. App. 157a. The court also found that "[c]ulverts which are improperly designed, installed, or maintained may *completely bar* salmon from access and cause local extirpation of a run." Pet. App. 161a (emphasis added). As a

result, State barrier culverts downstream are directly obstructing fish passage to many of the Tribes' usual and accustomed fishing grounds upstream. Pet. App. 271a.[6]

It is hard to imagine a more fundamental abridgment of the Tribes' right of taking fish at *all* usual and accustomed grounds and stations. The district court predicated liability on this "narrow" ground, directing the State "to refrain from impeding fish runs in [this] one specific manner." Pet. App. 271. This Court likewise may resolve liability on this basis alone.

2. The State's barrier culverts have also significantly degraded the fishery as a whole. This material interference with the Tribes' secured right of taking fish violates the Treaties.

a. The relevant facts are not in dispute. "State-owned barrier culverts are so numerous and affect such a large area that they have a significant total impact on salmon production." Pet. App. 162a. As the district court found, salmon harvests have "declined precipitously, ... particularly in the last few decades," with many salmon stocks now "depressed, in danger of extinction, or already extinct." Pet. App. 136a, 157a, 167a, 175a, 253a-254a & n.3. The court recognized, based on the undisputed facts, that "a significant portion of this diminishment is due to the

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[6] In discussing remedy Washington contends that others, too, are barring fish passage on some of the same streams. *See* Part III.B, *infra*. Washington correctly does not contend that those other culverts affect *liability*. At common law, a defendant was liable for blocking fish passage whether or not "there are other obstructions in the river." *Leys, Masson & Co. v. Forbes*, (1831) 5 W. & S. 384, 393 (H.L. Scot.). So too under the Treaties.

blocked culverts which cut off access to spawning grounds and rearing areas." Pet. App. 160a-162a, 176a, 256a, 263a.

How the culverts cause these severe negative impacts is no mystery. Salmon need access to and from the sea to survive: salmon "spawn in freshwater, migrate to the sea, and return to spawn again in fresh water." Pet. App. 131a; *see* p. 3, *supra*. As the district court concluded, barrier culverts directly interfere with this process. Pet. App. 175a. The State itself has repeatedly recognized that its barrier culverts "obstruct habitat," sometimes "many miles" above a culvert, and contribute to significant declines in the salmon population. 1997 Wash. Sess. Laws 2356; J.A.427a-428a; *see* Pet. App. 147a; J.A. 612a; p. 11, *supra*.

b. The State and its *amici* contend that recognizing liability here would open the floodgates to challenges against any land or water uses that might affect "fish abundance." Wash. Br. 32; *see also* American Forest Br. 16; Business Br. 22.[7] The

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[7] *Amici*'s argument that adhering to the Treaties would "undermine Washington's water-rights regime" and deny water to "future users" (Business Br. 26-27) is particularly ill-founded. Washington, like other prior-appropriation states, has long considered tribal claims to "water for the preservation of fishing rights" in its comprehensive water-rights adjudications. *State Dep't of Ecology v. Yakima Reservation Irrigation Dist.*, 850 P.2d 1306, 1317 (Wash. 1993). And it is unsurprising that treaty rights from the 1850s would have priority over claims by "future users." Thus, affirming the judgment in this case would not affect the status quo.

Other *amici* argue that the decision below affects EPA's implementation of the Clean Water Act. But their complaint centers on EPA's estimates regarding tribal subsistence consumption of fish (and hence of toxins). American Forest Br.

injunction here does not depend upon any such broad conception of liability. This case involves Washington's large-scale, direct interference with the treaty right, with hundreds of barrier culverts blocking hundreds of miles of habitat. *See* p. 11, *supra*.

Affirming liability on these facts does not require reading the Treaties to regulate every development decision, or even every activity that might impact the salmon population. Instead, the relevant question is whether a particular type of activity significantly degrades the fishery to the point that it materially interferes with the Tribes' secured right of taking fish. Small-scale, isolated activities that might affect salmon, but not significantly degrade the fishery, do not satisfy this standard.

The limits on what the Treaties prohibit follow directly from what kind of the rights the Treaties secure. At common law, the owner of a *profit à prendre* in a fishery could sue for nuisance to protect the fishery from degradations that would undermine his right of taking fish. Pp. 36-37, *supra*. But the law of nuisance did not let plaintiffs invoke the court's equitable authority in order to redress "trifles" or other minor, transitory infringements. H.G. Wood, *A Practical Treatise on the Law of Nuisances* § 7, at 15-16 (2d ed. 1883). Rather, the defendant's action had to "work material ... injury and damage" to the plaintiff's property interest, so as to actually compromise the "use and enjoyment" of the property. *Id.* § 4, at 7 & n.2. Likewise, the

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11-14 & n.2. Those estimates do not turn on whether the Treaties protect the fisheries; in Maine the fisheries are not even treaty-based.

contractual duty of good faith inherent in treaties, pp. 31-32, *supra*, bars one sovereign from taking action to "annul or avoid" the benefit the agreement grants to the other sovereign. 2 *Addison* 577. Actions that have minor effects on some fish will not rise to this level.

c. Aside from its parade of horribles, the State also insists (at 32-35) that the Treaties should not be construed to limit off-reservation land use in any way, given the text ceding the Tribes' "right, title, and interest." *Accord* Business Br. 8. Washington and its *amici* treat the Treaties as if the Tribes ceded a freestanding right to engage in unrestricted "development." Not so: the general cession came with specific qualifications, as the text and *Winans* both make clear. That is why this Court has recognized that "private owners ... had notice of these Indian customary rights by the reservation of them in the treaty." *Seufert Bros.*, 249 U.S. at 199.

Washington's argument is irreconcilable with *Winans*, in which the Court held that the Treaties *do* "impose[] a servitude" on the off-reservation land that reserves certain "rights" to the Tribes. 198 U.S. at 381. Washington tries to explain this holding away by arguing (at 33) that the off-reservation easements recognized in *Winans* supposedly were "explicit." But the Treaties do *not* explicitly refer to any "right of access." P. 28, *supra*. Rather, the *Winans* Court read the right of taking fish to encompass a right of access across private lands, to "give effect to the treaty." 198 U.S. at 381.

Here the Treaties' off-reservation applicability is even clearer. The Treaties permanently and explicitly "secure[]" the right of taking fish, including

at "grounds and stations" outside reservations. Art. III, 10 Stat. 1133. And there is no "private development" exception. Where the Treaties qualified one of the Tribes' retained rights, they did so expressly. For instance, the Tribes' rights "of hunting" or "gathering roots and berries" apply only to "open and unclaimed lands." *Id.* Thus, the Tribes do not have a continuing right to hunt on lands that are no longer "open and unclaimed." No such restrictions apply to the Tribes' right of taking fish: the "comprehensive language" of the fishing clause (*Seufert Bros.*, 249 U.S. at 199) extends to all of the Tribes' "usual and accustomed" grounds and stations *regardless* of whether they remain "open and unclaimed."

C. Washington's Complaints About The "Moderate Living" Standard Are Misplaced.

Washington and its *amici* insist that the court of appeals recognized what they call a "new treaty right," which supposedly guarantees the Tribes a moderate living from salmon fishing in perpetuity. But the moderate-living standard articulated in *Fishing Vessel* for harvest allocations is not the basis of the Tribes' treaty claim here. The Tribes are not arguing that the State has an affirmative duty to ensure a fishery robust enough to sustain the Tribes. And the injunction says nothing about restoring a moderate living.

Rather, the moderate-living standard acts as a *check* on the State's liability—a potential defense against breaches of the Treaties. Washington never invoked the defense here, and the facts would not support it.

In *Fishing Vessel*, the Court held that the right of taking fish "in common with" non-Indians entitles the Tribes to take up to 50% of the annual salmon harvest, subject to downward adjustment if a lesser share would satisfy tribal needs. 443 U.S. at 685-687. Thus, if the Tribes were earning a moderate living from the fishery despite Washington's barrier culverts, the Tribes could not argue that the culverts had substantially degraded the fishery in violation of the Treaties. But Washington declined to argue that the Tribes are earning a moderate living from the fishery (C.A.S.E.R.136 n.75), and the district court found that salmon declines have "damaged tribal economies" and "left individual tribal members unable to earn a living by fishing" (Pet. App. 157a-158a).

The State does not contest these factual findings because it cannot. But it tries to undercut them by asserting, without context, that the Tribes "take millions of salmon annually." Wash. Br. 1, 8, 40. It is undisputed, however, that salmon harvests have declined by millions of salmon per year over the last several decades and that both tribal and non-tribal fishing economies have been decimated as a result. Pet. App. 132a-133a, 175a, 183a-186a. The decline has been particularly significant for chinook, coho, and steelhead, J.A.200a-203a, the most valuable salmon species. Moreover, as the State concedes (at 8), the total harvest numbers do not address the fact that various "salmon populations are ailing," which has left Tribes unable to take fish from *all* of their usual and accustomed grounds and stations.

Trying another tack, the State suggests that a significant decline in fish harvests is no great loss for

the Tribes because the Treaties contemplated that they would learn "blacksmithing, carpentry, and farming." Wash. Br. 33. But the historical record makes clear that the negotiators intended to provide opportunities to integrate into the non-Indian economy *without* requiring the Tribes to relinquish the role of fishing in their way of life. Traditional and new ways of living were to form "a single, compatible whole." J.A.127a-129a. The Tribes were told that the Treaties "required no choosing between fishing and farming," and that they did not need "to give up their old modes of living and places of seeking food" as part of their bargain. J.A.128a-129a. That is why the Treaties protected the right of taking fish *permanently*.

D. The State Fails To Identify Any Treaty Interpretation That Would Protect The Fishery From Destruction Without Also Requiring Affirmance Here.

Washington previously acknowledged where the logic of its interpretation leads: it admitted to the court of appeals that, on its reading, it could destroy the fishery by blocking *all* salmon from passing upstream without even implicating the Tribes' treaty rights. *See* p. 2, *supra*. In this Court, Washington has tried mightily to walk back that answer, but it cannot provide a coherent treaty interpretation that avoids endorsing that absurd result but still enables the Court to rule in its favor. As the district court recognized (Pet. App. 256a), if the Treaties impose

any protections for the fishery, then they are necessarily violated by the State's actions here.[8]

The State protests that a ruling in its favor would not jeopardize the fishery, and it points (at 9-10 & n.9, 42 & n.31) to "numerous state and federal laws" that ostensibly "protect salmon from destruction." But the State fails to explain how laws postdating the Treaties by a century or more could inform the scope of the Tribes' *treaty* rights. Ultimately, the State suggests that the Tribes should trust the State's beneficence, as it disclaims (at 2) any "desire[]" to destroy the salmon fishery and notes (at 43) that its own citizens benefit from healthy salmon populations. The Treaties, however, secure the Tribes' *right* of taking fish. They do not leave the Tribes "at the mercy of *noblesse oblige*." *United States v. Stevens*, 559 U.S. 460, 480 (2010).

Moreover, history shows that despite the State's current pledge of good faith, it has often pursued its own interests at the expense of the Tribes' treaty rights: "For more than 100 years, the State ... deliberately and systematically prevented the Tribes from engaging in the off-reservation fishing promised under the Treaties." Pet. App. 7a.[9]

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[8] Notably, Washington's *amici* accept this consequence of a ruling for the State, even as the State strains to avoid it. *See, e.g.*, Idaho Br. 15-16 (arguing that the Treaties provide no protection against development that "destroy[s] the fish runs").

[9] Washington argues (at 36-37) that the United States may have violated the Treaties in the past, but identifies no reason why *the State* would therefore be insulated from liability. Washington purports to rely on the course of dealing between "the parties," but it points to no evidence that *the Tribes* acquiesced in actions that "decimated salmon populations in areas covered by the Treaties." Moreover, actions by federal

As for protections provided by *the Treaties*, the State relies primarily on the possibility that federal courts have *in rem* jurisdiction over the fishery to allocate the annual harvest, and so may prevent destruction of the fishery in order to protect their own jurisdiction over the *res* (the fish). *See* Wash. Br. 41-42. This suggestion is hard to square with the State's complaints about the burdens imposed by ongoing judicial supervision of fishing in Puget Sound. *See* Wash. Br. 15-16; Idaho Br. 31-32. And there is no textual or other basis to surmise that the Treaties protected federal-court jurisdiction over the fishery in lieu of protecting the fishery itself. Indeed, Congress had not yet even established general federal-question jurisdiction in the 1850s. *See Tennessee v. Union & Planters' Bank*, 152 U.S. 454, 459 (1894).

In any event, the State's *in rem* theory would support affirmance here, as the case Washington relies on (at 42) makes clear. In *United States v. Oregon*, 657 F.2d 1009 (9th Cir. 1981) (Kennedy, J.,), the court of appeals affirmed the district court's authority to enjoin tribal fishing to preserve a salmon run, because the salmon population had "severely declined" and the fishery was "in jeopardy." *Id.* at 1010-1014. The findings here are indistinguishable.[10]

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employees (especially those without direct responsibility for implementing the Treaties) are no basis to defeat the Tribes' treaty rights. *See* Part II, *infra*.

[10] The State also suggests (at 42) that it could not destroy the fishery because doing so "would necessarily involve some degree of discrimination against tribes" given their "historical reliance on salmon." *Id.* But if destroying the fishery discriminates against the Tribes because of their reliance on salmon, then so

II. The District Court Correctly Dismissed Washington's Insubstantial Equitable Defense.

Washington argues that even if it has violated the Tribes' treaty rights, the lower courts should have allowed it to resist relief by asserting (unidentified) "equitable defenses" against the United States. Washington's answer pleaded "waiver and/or estoppel" (J.A.86a-87a), but this Court has never allowed such a defense to an action by the United States to enforce federal law. And these inadequate allegations should not be the first.

A. Inaction By Government Employees Does Not Estop The United States.

Washington cites no case from this Court in which a defendant successfully invoked an equitable defense to bar a suit by the United States to enforce federal law. To the contrary: the Court has "reversed every finding of estoppel that [it has] reviewed," often summarily. *Office of Pers. Mgmt. v. Richmond*, 496 U.S. 414, 422-423 (1990). If individual government employees could make promises that immunize a violation of federal law, "the rule of law [would be] undermined." *Heckler v. Cmty. Health Servs. of Crawford Cty., Inc.*, 467 U.S. 51, 60 (1984).

Indeed, this Court has rejected far more plausible attempts to defeat Indian claims by estopping the federal government. The Court has repeatedly held that even the formal issuance of a land patent cannot estop the government. *Cramer v. United States*, 261

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does blocking fish passage or otherwise significantly degrading the fishery.

U.S. 219 (1923); *Winans*, 198 U.S. at 382. The Court made short work of the estoppel argument in *Winans*: "[t]he Land Department could grant no exemptions from [the Treaty's] provisions." *Id.* In *Cramer*, the claim of estoppel was stronger, because the Indians' prior claim to the patented land derived only from an *implied* grant. Nevertheless, this Court held that the patent was "unauthorized and could not bind the government; much less could it deprive the Indians of their rights." 261 U.S. at 234. Here, by contrast, the Tribes' rights are formally enshrined in a treaty, and there can be no settled expectations to the contrary. *Seufert Bros.*, 249 U.S. at 199.[11]

Washington relies mostly on *City of Sherrill v. Oneida Indian Nation*, 544 U.S. 197 (2005), a case brought by Indian Tribes—*not* the United States—seeking to restore aspects of sovereignty after almost two centuries, over original reservation land repurchased on the open market. *Sherrill* is triply inapposite. This case deals with *present-day* impediments to the Treaty-protected "right of taking fish." That right implicates none of the "repose" issues that the sovereignty claim in *Sherrill* did. 544 U.S. at 218-219. And the Tribes have been invoking that right (on the water and in court) for more than 150 years.[12] Indeed, in the district court,

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[11] Washington does not discuss *Cramer*. *Amici* argue that in *Cramer* the Interior Department's "settled government policy" trumped the land patent. Idaho Br. 27-28 (quoting 261 U.S. at 229-230). A federal treaty is a far more "settled" policy.

[12] The Second Circuit has applied *Sherrill* to the federal government on the incorrect theory that a claim brought by the United States as trustee for Indians is a claim "in the nature of private rights." *Cayuga Indian Nation v. Pataki*, 413 F.3d 266, 279 (2d Cir. 2005). As the United States explains, enforcing

Washington never framed its argument as one about timeliness; it cannot smuggle in such an argument now by obscuring which "equitable defenses" it claims.

B. The Federal Government Is Not Responsible For Washington's Treaty Violations.

Washington's defenses are spurious in any event. In arguing (at 46, 50-51) that "[t]he federal government" "required that culverts be built to federal specifications," and "directed the State to build culverts as it did," Washington cannot plausibly claim that a federal agency actually *required* it to block fish passage. That is because it never happened.

Washington contended below that it based its state "Hydraulics Manual" governing culvert design on a Federal Highway Administration (FHWA) publication, "Hydraulic Engineering Circular #10," J.A.100a-101a ("Circular #10"), and this state manual was then approved by FHWA, J.A.119a. Washington averred that it "reasonably concluded that by approving or failing to object to the State's culvert design and maintenance, the FHWA had determined that the design and maintenance satisfied any treaty obligation." J.A.78a. But Washington has since admitted that FHWA never said that the *national* "federal design standards were sufficient to meet the fish passage" requirements of the Treaties. J.A.735a. FHWA did not even consider the question. J.A.119a. And "[t]o constitute an

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compliance with the Nation's solemn treaty obligations is no mere "private right."

estoppel by silence there must be something more than an opportunity to speak. There must be an obligation." *Wiser v. Lawler*, 189 U.S. 260, 270 (1903). Washington identifies none.

Nor did the federal government require Washington to use any particular culvert design. Circular #10 is nothing more than a set of charts showing the calculated discharge flows for culverts with particular characteristics. It concerns sufficiency for flood control, not fish passage. Washington has admitted that FHWA did not "preclude[] the State from modifying the design standards to accommodate local conditions," J.A.735a, as Washington later did when it identified fish-passage problems with its designs. J.A.101a.

In short, the United States neither compelled Washington to use any particular culvert design nor told Washington it would comply with the Treaties if it did. There is thus no basis for an estoppel, much less for an unprecedented estoppel against the government.

III. Washington's Fact-Specific Criticisms Of The Injunction Lack Merit.

The district court's approach to remedying the Treaty violation was both flexible and appropriate. Although the State nitpicks the remedy in this Court, it refused to propose alternatives in district court. Pet. App. 8a-9a, 107a; *see* C.A. Oral Arg. 55:58 ("We did oppose the entry of any injunction; we did not propose a narrower injunction."). The district court nevertheless thoroughly balanced the equities, considered issues of cost and benefit, adopted a formula that allows the State to defer a large

number of culvert repairs until much later, and gave the State more time to comply than the United States recommended (*see* J.A.63a-64a). The court also drew on more than a decade's experience in presiding over this litigation.

Washington does not even mention the applicable standards of review; it just contends that the evidence supporting the district court's key findings are "no[t] persuasive" or not "very compelling." Wash. Br. 56, 58. But rote invocations of federalism do not excuse the State from the applicable standards. Washington never identifies a "very obvious and exceptional showing of error," as necessary to second-guess "concurrent findings of fact by two courts below." *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 336 U.S. 271, 275 (1949); *see also* Fed. R. Civ. P. 52(a)(6). Nor does it identify any abuse of discretion in the remedy itself.[13]

A. The Record Demonstrates A Clear Connection Between The State's Barrier Culverts And Their Impact On Salmon.

Washington argues that the United States and the Tribes submitted "no persuasive evidence" of "a clear connection between culverts and tribal harvests." Wash. Br. 56, 57. The district court found to the contrary, with ample support.

1. The district court found that state-owned barrier culverts have "a significant total impact on salmon production." Pet. App. 162a. Specifically,

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[13] Indeed, given the posture and fact-bound nature, the Court may wish to dismiss this question presented as improvidently granted. *City & Cty. of San Francisco v. Sheehan*, 135 S. Ct. 1765, 1774 (2015) (partial dismissal).

"[t]he construction and operation of culverts that hinder free passage of fish has reduced the quantity and quality of salmon habitat, prevented access to spawning grounds, reduced salmon production in streams in the Case Area, and diminished the number of salmon available for harvest by Treaty fishermen." Pet. App. 176a; *see also, e.g.*, Pet. App. 158a, 160a-162a, 177a. Those findings were amply supported by evidence, *see, e.g.*, J.A.407a, 431a, 673a; C.A.S.E.R.31, including evidence prepared by the State itself, J.A.603a, 612a; p. 11, *supra*.

Rather than trying to show clear error in these factual findings, Washington does not mention them. Instead, it complains (at 57) about *the court of appeals'* reference to a document that, Washington says, the district court never cited. But a quibble about the court of appeals' decision does not undercut the district court's findings or the State's clear admissions on the subject.

Washington also notes (at 56-57) that harvests have fluctuated. But no one disputes that multiple factors influence salmon populations. The question is whether barrier culverts are among them. The district court properly found that they are. Indeed, the State's own witness admitted that "if [anadromous fish] cannot reach spawning and rearing areas, ... even healthy fish stocks decline to levels that cannot support utilization objectives and even levels of extinction." J.A.739a. And, by stipulation, this case focuses *entirely* on culverts that block fish passage, including to spawning and rearing areas. Pet. App. 253a.

2. The State also contends that "systemwide relief" is inappropriate absent culvert-by-culvert proof of

fish loss. Wash. Br. 57-58. But as the district court correctly explained, injunctive relief does not turn on "quantify[ing]" the per-culvert fish loss with mathematical precision. Pet. App. 175a, 256a. Indeed, witnesses testified at trial that assessing fish-passage benefits programmatically would "make more sense[]" than a culvert-by-culvert evaluation, J.A.709a, which would ignore the "cumulative effects [that] can accrue across a variety of watersheds," Pet. App. 114a.

Washington contends (at 56-57) that despite these findings, culvert-by-culvert proof is *required* by *Lewis v. Casey*, 518 U.S. 343 (1996). But in *Lewis*, the plaintiffs sought systemic changes across all of a state's prisons despite demonstrating only *two* instances of constitutional injury. *Id.* at 346-349, 356. The Court recognized such proof was "patently inadequate." *Id.* at 359. In so holding, the Court did not require the kind of one-for-one limitation on equitable relief that Washington is demanding.

Here, the State itself counts *1,000* fish-blocking culverts. J.A.225a-226a. Not only do they block passage on individual streams (which alone suffices to establish a violation of the Treaties, pp. 39-40, *supra*), they also have systemic effects on the salmon population "in every watershed within Puget Sound." J.A.673a. And the injunction is reasonably tailored to remedy both types of violations, because it applies only to culverts actually impassable to fish. That is exactly what injunctive relief is supposed to do—restore the wronged parties "to a position they would have enjoyed absent" the violations. *E.g.*, *Milliken v. Bradley*, 433 U.S. 267, 280 (1977). The district court was not required to find a complete, freestanding

Treaty violation at individual culverts; determining a remedy for the camel's broken back does not have to entail separate litigation over each straw.

B. The District Court Gave The State Sufficient Flexibility To Prioritize Culvert Repairs.

Washington also complains that the injunction is overbroad because some state-owned culverts are either upstream or downstream of culverts that the State does not own. Washington insists that repairing these culverts "will have no impact." Wash. Br. 53-54. That is wrong for multiple reasons. *See* Pet. App. 110a-112a. And in any event, the injunction gives Washington flexibility to defer a substantial number of culvert replacements.

1. Washington fails to mention that the overwhelming majority of non-state-owned barrier culverts are *upstream* from state-owned barriers. In other words, the first barrier between the ocean and the river habitat is usually a state-owned barrier culvert. J.A.397a (of the 1590 non-state-owned barriers that are on the same stream as a state-owned barrier, 1370 are upstream). Washington invokes (at 53) one creek with 36 non-state culverts, but *all 36* are at least half a mile *upstream* of the one state culvert. Pet. App. 111a; C.A.E.R.204. The potential impact from repairing the state culvert is apparent.

2. As to the relatively small number of state barrier culverts with other culverts downstream, the State is wrong to suggest that replacing them will have "no impact." To begin with, the large majority of the downstream culverts (in one analysis, almost

70%) allow partial passage of fish—meaning that some salmon can get as far as the state-owned culvert and are blocked there. Pet. App. 111a; J.A.779a-780a; C.A.E.R.211.

Moreover, contrary to its position in this Court, the State itself has regularly pursued replacement projects even when there is a non-state-owned culvert downstream. *See, e.g.*, J.A.737a-738a (State's witness testifies that project with one non-state culvert downstream is "a good project" because of the "significant amount of habitat upstream"); C.A.E.R.196; *see also* J.A.329a (similar). That makes good sense because the downstream barriers may well be replaced. Indeed, those barriers *violate state law*, which has required fish passage since before automobiles were invented. The State could have enforced that law, civilly or even criminally. Pet. App. 139a-140a; J.A.294a-295a, 612a. It cannot use its own non-enforcement to excuse its own blockages. And even if it lacked enforcement power, Washington has long said that it works cooperatively with other entities to address their barriers. J.A.384a (noting "opportunities to work with other entities to fix several culverts or habitat problems at once"); C.A. S.E.R. 33 (cooperative projects between WDFW and counties); C.A.E.R.125; Pet. App. 155a-156a.

Thus, in evaluating the benefits from replacing a barrier culvert, it makes sense to focus on distance to a permanent barrier rather than a remediable one. The State follows this approach in formulating its own Priority Index, as its scientists treat those non-state, man-made barriers as "transparent, ... as if all those barriers would be corrected at some point in time." Pet. App. 110a-111a (quoting J.A.696a). The

district court reasonably adopted the same approach, particularly because the record demonstrates that the federal government, Tribes, and private landowners have all taken significant steps toward remediating their own barrier culverts—with state culvert correction encouraging private landowners to fix their own barrier culverts. J.A.414a-415a ($10 million in restoration projects by one Tribe since 1994); J.A.780a; Pet. App. 149a (timber-purchaser projects).[14]

3. The district court gave Washington ample flexibility to address the handful of state culverts whose correction would not affect salmon passage if other blockages remain. The injunction permits the State to defer indefinitely the correction of all barrier culverts with less than 200 meters of habitat gain, *plus* culverts that would collectively open up less than 10% of the total habitat. Pet. App. 238a. Washington has made no effort to demonstrate that the leeway afforded by this provision would not completely solve the hypothetical non-state-barrier problem. The State's own figures show that it will likely be able to defer more than 200 culverts under that provision. *Id.* at 114a-115a. The State has never argued, much less presented evidence to show, that downstream culverts totally cut off more than

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[14] Washington protests (at 54) that it does not use the Priority Index to determine the order of culvert replacement. What matters is that, in an index the State deems "a good tool for comparing the relative benefits of different projects," the State disregards other manmade barriers "because we don't know when the others might be fixed." J.A.300a, 308a. Washington does not assume that they will *never* be fixed, as it insists the district court was required to do.

200 of the state-owned barrier culverts. *See id.* at 111a.

If 10% was not enough flexibility, the time for the State to object was *before the injunction was issued.* But the State did not offer any more permissive alternative in the trial court. *See* ECF No. 663, at 28. Particularly in light of the State's strategic decision to sit out the discussion, the district court did not abuse its discretion by providing the degree of flexibility that it did.

C. The State's Cursory Complaints About Cost And Equitable Balancing Are No Basis To Reverse.

Finally, the State disagrees (at 54-55, 58-59) with how the district court considered costs and balanced the equities. These contentions mostly depend on other arguments refuted above (*e.g.*, that the compliance costs will be "wasted," and that the equities are with the State because the fault lies with the United States).

To the extent Washington is arguing that cost is an independent basis for reversal, it persists in advancing a figure of $2 billion required by 2030. Two courts have already found that estimate baseless, and the State does not even attempt to argue that this finding is clearly erroneous, much less "obvious[ly] and exceptional[ly]" so. *Graver Tank*, 336 U.S. at 275; *see* Pet. App. 16a, 118a-120a, 170a. Washington overstates both the number of culverts requiring replacement and the average cost of a replacement. Pet. App. 119a (calling Washington's extrapolation "demonstrably incorrect"). Judge O'Scannlain acknowledged that

the range of costs in the findings is well below the estimate that the State sticks to. *See* Pet. App. 18a n.1. And the costs are spread over nearly two decades. The state transportation budget was nearly $10 *billion* for each two-year period, and is growing. *Id.* at 171a.

Furthermore, the injunction requires the State to "accelerate the pace of barrier correction" that is already required, not to spend money on something it planned never to fund. Pet. App. 177a-178a; *see also* Pet. App. 119a-120a, C.A.E.R.697-699. And the designs the injunction specifies (stream-simulation culverts and bridges) are the State's own stated preference "where feasible," which is all the injunction requires. J.A.226a; Pet. App. 239a-240a.

These expenditures will benefit the State and its citizens (as well as the Tribes). Indeed, the State has repeatedly said that it sees $4 in benefits for every dollar spent on culvert corrections. J.A.427a, 440a-441a, 617a. Stream-simulation culverts in particular "offer superior fish passage and habitat benefits" because they are "less likely ... to become fish passage barriers in the future." Pet. App. 170a.

Moreover, while Washington complains about the federal role in creating the problem, it fails to mention that it receives substantial sums from the federal government to pay for fish-passage projects. Pet. App. 171a.

Finally, the State reargues the equities in two cursory sentences (at 59) asserting its own lack of culpability. That is not really an equitable argument; the injunction is not punishment, but remediation. Equitable balancing weighs the cost to

the State transportation budget against the harm to the Tribes and the public interest. And the district court acted well within its discretion in concluding that "[t]he balance of hardships tips steeply toward the Tribes." Pet. App. 177a. The culverts' continued degradation of the salmon fishery causes the Tribes a significant and ongoing injury—not just to their economies, but also to their spiritual needs and way of life. *Id.* It also harms the public interest, including non-Indian commercial and recreational fishing. *Id.* at 178a. And it dishonors a solemn commitment of the United States.

Allowing the State to maintain its preferred glacial pace for fixing culverts may well cause the degradation of the fishery to pass a tipping point, beyond which this remarkable resource can no longer recover. The promise of a permanently secured right of taking fish would then be broken beyond repair. The district court granted injunctive relief to ensure that remediation will not come too late.

* * * * *

Despite the exaggerations of Washington and its *amici*, this case is straightforward. The Treaties secure the right of taking fish, at all usual and accustomed grounds. Washington's barrier culverts undermine that right by preventing the fish from getting to their spawning grounds—and to the Tribes' fishing grounds. The district court's equitable decree is an appropriate means of remedying, over time, that violation of the Treaties.

CONCLUSION

The judgment of the court of appeals should be affirmed.

Respectfully submitted.

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No. 17-269

In The
Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.,

Respondents.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

REPLY BRIEF FOR THE PETITIONER

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INTRODUCTION

Treaty interpretation should not start from a result and work backwards. There must be a principle in the treaty that requires the result and can be applied in future cases.

Respondents advanced such a principle for decades in this litigation and convinced the lower courts to adopt it: "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet.App. 94a. But Respondents now abandon that rule. In this Court, they start from the result—State culverts violate the Treaties—and offer several alternative theories to work backwards to that conclusion. The lower courts never endorsed these theories, and this Court should not adopt them in the first instance. Instead, it should answer the first question presented in the negative and vacate the Ninth Circuit's decision.

In any event, Respondents' alternative theories fail on the merits. While Respondents articulate the theories differently—highlighting that neither lower court adopted them—their proposals share common themes: the Treaties prohibit obstructions that "substantially degrade" the fishery. This claim lacks support in treaty text, history, and precedent, and would mean that dams the federal government built and licensed across the Northwest violate the Treaties.

Even if the Court found that one of these theories had merit, the proper result would be to remand, not affirm, because these theories fail to justify the rulings below. What counts as an "obstruction" and as "substantial degradation" are

crucial questions under these theories, questions nowhere answered in the lower court opinions. For example, the lower courts treated all State "barrier culverts" as violations, even though half are only partial barriers and allow fish passage. And Respondents' highest estimate of the number of fish affected by State culverts is a fraction of one percent of historic harvests. Is that substantial degradation? If this Court adopts one of Respondents' new theories, it should articulate the rule more clearly than they have and remand to the district court to apply it.

If the Court remands, it should also order consideration of the State's equitable defenses and require modification of the injunction, which orders far more than Respondents' new theories could justify.

ARGUMENT

A. Respondents Abandon the Principle Underlying the Decisions Below

Respondents disclaim the fundamental rationale for the rulings below, asserting that "the moderate-living standard . . . is not the basis of the Tribes' treaty claim here." Tribes' Br. 44. They portray the moderate-living test as a minor feature of the lower court rulings they never requested. U.S. Br. 35 ("[N]o party was requesting the guarantee of a 'moderate living.'"). This is inaccurate.

In the district court and the Ninth Circuit, Respondents repeatedly argued that "the right to earn a moderate living from fishing is constant as an essential element of the Treaty right as interpreted by the Supreme Court." U.S. CA9 Br. 19-20 n.3; *see also* U.S. CA9 Br. 20 ("[T]he Tribes are entitled under the

Treaties to an 'adequate supply of fish' so long as necessary to provide them with a moderate living."); Tribes' CA9 Br. 26 (arguing that the Treaties "reserve enough fish for tribes to live by fishing"); J.A. 54a ("The basis for the relief stated above is the State's duty, pursuant to the Stevens' Treaties, to refrain from impairing the tribes' ability to achieve a moderate living from their fisheries[.]"); J.A. 46a-47a, 62a-64a, 108a-09a, 120a (Respondents invoking moderate-living standard).

The Ninth Circuit based its decision on Respondents' moderate-living theory. It concluded that the treaty negotiators explicitly promised, and the Treaties implicitly promised, "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet.App. 94a, 92a; *see also* Pet.App. 95a-96a ("Salmon now available for harvest are not sufficient to provide a 'moderate living' to the Tribes. . . . We therefore conclude that in building and maintaining barrier culverts . . . Washington has violated . . . the Treaties."). Respondents themselves acknowledged in opposing certiorari that a moderate-living guarantee was the foundation of the Ninth Circuit's holding, but argued that it created no conflict with precedent. *See, e.g.*, U.S. BIO 13 ("The [Ninth Circuit's] conclusion that petitioner violates the treaty fishing right by interfering with the Tribes' ability to ensure a moderate living does not conflict with . . . *Fishing Vessel*[.]"); Tribes' BIO 20 (arguing that "the Court of Appeals relied on the moderate living standard . . . to bound the State's obligation").

The district court's findings and judgment are also tied to this theory. It understood Respondents' claim as asserting "that the State has a treaty-based

duty to preserve fish runs so that the Tribes can earn a 'moderate living'." Pet.App. 250a. It rejected the State's critiques of the moderate-living standard, calling it a measure of the treaty right "created by the [Supreme] Court." Pet.App. 263a. It found that "[t]he Tribes are at present unable to harvest sufficient salmon to meet their needs and provide a livelihood," Pet.App. 158a, and suggested that *any* reduction from historic harvest levels would be a treaty violation, Pet.App. 175a (holding that "diminished harvests have harmed the Tribes," and "[i]t is not necessary that the Tribes quantify the amount of loss in order to demonstrate their entitlement to relief"). *See also* Pet.App. 256a, 271a.[1]

In short, the decisions below were premised on Respondents' claim that the Treaties entitle the Tribes to a minimum quantity of fish tied to their needs, a principle they now abandon. The Court should answer the first question presented in the negative and vacate the Ninth Circuit's opinion.

B. The Court Should Decline to Consider Respondents' Alternative Theories

Having abandoned the theory underlying the decisions below, Respondents ask this Court to affirm on an alternative theory. They offer several versions

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[1] The United States claims the district court "criticized the State" for suggesting that the Tribes' claim was based on a moderate-living standard. U.S. Br. 35 (citing Pet.App. 280a). But that ruling was issued by a different judge six years before the summary judgment ruling. Pet.App. 280a. The judge who granted summary judgment and the injunction characterized Respondents' claim as seeking a moderate-living right. Pet.App. 250a.

of the proposed theory, citing a range of new sources from the law of nations to the common law. The Court should decline their request based on the longstanding rule that this is "'a court of review, not of first view.'" *McWilliams v. Dunn*, 137 S. Ct. 1790, 1801 (2017) (quoting *Cutter v. Wilkinson*, 544 U.S. 709, 718 n.7 (2005)).

The Tribes offer several variations on their proposed treaty right. They first argue that culverts violate the Treaties for two independent reasons: (1) culverts obstruct salmon from reaching upstream places where tribes have a right to take fish; and (2) culverts cause a "substantial degradation of the fishery." Tribes' Br. 19-20. Later, they say "the relevant question is whether a particular type of activity significantly degrades the fishery to the point that it materially interferes with the Tribes' secured right of taking fish." Tribes' Br. 42. They then say that "if the Tribes were earning a moderate living from the fishery . . . the Tribes could not argue that the culverts had substantially degraded the fishery in violation of the Treaties." Tribes' Br. 45. The Tribes' theory extends beyond "obstructions," as they claim it also governs water rights. Tribes' Br. 41 n.7.

The United States sometimes asserts a narrower view, arguing that the Treaties prohibit only conduct that obstructs fish *and* substantially degrades the fishery. U.S. Br. 15 ("[T]he Stevens Treaties prohibit the State from imposing obstructions that substantially degrade or destroy the Tribes' traditional fisheries."), 20 (the Treaties prohibit "obstructions that would substantially degrade the resource"), 31 ("[T]he Tribes' right should be interpreted as including protection against

substantial depletion of their fisheries through imposition of impassable obstructions by the State."). But at other times, the United States suggests that the Treaties extend beyond preventing obstructions, and include a broader "right against substantial degradation of tribal fisheries." U.S. Br. 19. The United States never explains how either theory can be reconciled with its construction and licensing of dams throughout the Northwest that obstruct and substantially degrade tribal fisheries. *See, e.g., Idaho ex rel. Evans v. Oregon*, 462 U.S. 1017, 1020-21 & nn.2-5 (1983) (describing federal dams on the Columbia and Snake Rivers that decimated salmon runs).

It is thus unclear exactly what treaty right Respondents now claim. What is clear is that the rights they now assert were not the basis for the decisions below.

The Ninth Circuit never applied any sort of substantial-degradation test. No variation on the phrase "substantial degradation" appears anywhere in the Ninth Circuit's opinion or in Respondents' briefing to that court. (By contrast "moderate living" appears at least fifteen times in Respondents' Ninth Circuit briefing.)

The district court likewise never used the phrase "substantial degradation" or required Respondents to show that culverts had "substantially degraded" the fishery, instead finding it sufficient that "culverts are responsible for some portion of the diminishment." Pet.App. 256a. The court repeatedly emphasized that Respondents did not need to quantify the effect of State culverts, Pet.App. 256a, 175a ("It is

not necessary that the Tribes quantify the amount of loss . . . ."), and even held that "[t]he Court is not limited in granting relief to requiring that culverts identified as blocking fish passage be repaired," Pet.App. 174a. The district court did once use the phrase "significantly degrade" to describe the parties' understanding, Pet.App. 270a, but it never applied that standard, instead indicating that *any* diminishment from historic harvests would be a violation, Pet.App. 256a (describing the issue as whether the Treaties impose on "the State a duty to refrain from diminishing fish runs" by building culverts); Pet.App. 271 (holding that culverts violate the Treaties because they "diminish the number of fish that would otherwise be available for Tribal harvest"). Even Respondents describe the district court as "recogniz[ing] that the State's liability turns on whether the Treaties impose *any* obligation on the State not to block fish passage or otherwise degrade the fishery." Tribes' Br. 23. This was not a "substantial-degradation" test.

This Court ordinarily does "'not decide in the first instance issues not decided below.'" *Zivotofsky v. Clinton*, 566 U.S. 189, 201 (2012) (quoting *NCAA v. Smith*, 525 U.S. 459, 470 (1999)). Given that the lower courts never decided whether the Treaties create the rights Respondents now claim, this Court should decline to address these theories in the first instance and should reverse on the theory actually applied.

C. Even if the Court Considers and Accepts One of Respondents' Alternative Theories, It Should Remand, not Affirm

Even if Respondents' alternative theories had merit—which they do not, as detailed in Part D—they would not support affirming because they cannot justify the judgment and injunction. Thus, if the Court considers and accepts one of these theories, it should not affirm, but rather should articulate the rule clearly and remand for the district court to apply it.

Respondents contend that the judgment and injunction are supportable because "[t]he courts below properly concluded that the Stevens Treaties prohibit the State from imposing obstructions that substantially degrade or destroy the Tribes' traditional fisheries." U.S. Br. 15, 40; Tribes' Br. 39 ("This is a fish-blockage case . . . ."). Thus, even on Respondents' view, the judgment and injunction are supportable only if they prohibit "obstructions" that "substantially degrade" tribal fisheries. The judgment and injunction go vastly beyond that rule.

To begin with, many of the culverts that the district court deemed treaty violations would not even qualify as prohibited "obstructions" under the theories Respondents advance here. The district court treated all of the State's "barrier culverts" as treaty violations, using the State's definition of "barrier culverts." Pet.App. 159a, 236a-37a. But the State made a policy choice to define that term extremely broadly, and the State's definition does not align with Respondents' new theories in two crucial respects.

First, half of the "barrier culverts" that the district court deemed treaty violations are partial barriers and allow many fish to pass, only "imped[ing] fish of a certain size, for part of the year, or at certain stream flows." J.A. 381a. The State treats culverts as "barriers" even if they are 90% passable. J.A. 299a. While the State made the policy choice to categorize such culverts as "barriers," it makes no sense to define all partial barriers as "obstructions" and treaty violations. The Tribes themselves historically erected weirs that would qualify as "obstructions" under this theory because they blocked many salmon during parts of the year. J.A. 142a. The common law also allowed partial barriers to fish, even when it prohibited total barriers. *See, e.g.*, Joseph K. Angell, *A Treatise on the Law of Watercourses* 89 (1869) (explaining common law rule that generally prohibited downstream landowners from "*wholly* imped[ing] the passage of fish," and describing *Weld v. Hornby*, a leading case holding that a landowner created a nuisance by "convert[ing] a brush wear, through which *some* of the fish might and did escape, into a solid stone wear, which was entirely impervious" (emphases added)).

Second, the State identifies "barrier culverts" without regard to the location of usual and accustomed tribal fishing places. J.A. 297a-301a, 379a-82a. Thus, even if a state barrier totally prevents fish passage, there is no basis to assume that it obstructs fish from reaching a tribal fishing place. Respondents claim that "[m]any [state culverts] interpose a blockage between 'usual and accustomed' tribal fishing grounds and the ocean," Tribes' Br. 13, but they provide no citation for that claim or estimate

of how many, and the district court made no finding about how many State culverts block access to tribal fishing places. Respondents do include a picture that they say depicts a culvert blocking access to historic fishing places on the Nooksack River, Tribes' Br. 13, but there is no evidence that the picture depicts a *State* culvert, as opposed to a county, federal, or private culvert. (There is likewise no evidence that the culvert on page 12 of the Tribes' brief is the State's.)

Turning to "substantial degradation," neither Respondents nor the lower courts define this term (indeed, the lower courts never used it). Respondents suggest that "substantial degradation" means something close to "destruction." *E.g.*, U.S. Br. 37 (arguing that the State's acknowledgment of an anti-destruction rule "aligns with the decisions below and the position of the United States and the Tribes"); Tribes' Br. 48. But that is not remotely the standard applied by the district court, and its factual findings could not support a conclusion that State culverts "substantially degrade" the fishery under this standard or any reasonable definition.

Respondents' highest estimate of the impact of State culverts was that their removal "would result in an annual increase in production of 200,000 fish[.]" Pet.App. 255a. The district court never adopted this estimate or gave any numerical or percentage estimate of the effect State culverts have on tribal harvests. But even taking this estimate as true, it would make no sense to say that State culverts have destroyed or substantially degraded the fishery.

200,000 fish is less than 5% of recent harvest levels. J.A. 204a-05a. It is even smaller by historical

standards, when tens of millions of fish returned to Washington rivers annually. *See, e.g.*, J.A. 483a (39 million salmon caught in 1913 in Puget Sound alone). Many rivers in the case area historically produced far more than 200,000 fish *by themselves*. The Elwha, where the federal government recently removed two dams that had decimated salmon, is "believed to have produced nearly 400,000 spawning fish annually" before the dams. *Wild Fish Conservancy v. Nat'l Park Serv.*, 8 F. Supp. 3d 1289, 1292 (W.D. Wash. 2014); *see* J.A. 693a (Quinault River sockeye run "once numbered into a million"). If the cumulative effect of all State culverts is less than 5% of recent harvests, less than 1% of historic populations, and a fraction of what was previously produced by individual rivers, there is no plausible way to call their effect "destruction" or "substantial degradation."

To obscure this reality, Respondents rely on misleading and incomplete information. For example, Respondents emphasize the district court's findirg about the effects of barrier culverts on coho salmon in *tributaries* of the Skagit River, U.S. Br. 10, 51; Tribes' Br. 15, but they omit the rest of the finding, which estimates that barrier culverts caused only 6-13% of the total decline in the coho run in the Skagit River watershed. Pet.App. 161a. Even this estimate addressed the impact of *all* barrier culverts, not the effect of *State* barrier culverts. Pet.App. 161a; *see* J.A. 677a.

In sum, Respondents' new theories cannot justify the judgment and injunction. Indeed, the district court explicitly held that it was "not limited in granting relief to requiring that culverts identified as blocking fish passage be repaired." Pet.App. 174a.

Therefore, if the Court finds these theories compelling, it should clarify the exact rule imposed by the Treaties and remand to the district court for application. As Respondents now acknowledge, any such rule should require (at least) evidence that a State-owned culvert or series of culverts is substantially diminishing the number of salmon a tribe can take at its usual and accustomed fishing places. Tribes' Br. 42; U.S. Br. 31. Like the right to share fish recognized in *Washington v. Washington State Commercial Passenger Fishing Vessel Association*, 443 U.S. 658, 671 (1979), any such analysis should proceed "on a river-by-river, run-by-run basis," not based on allegations about the effect of culverts regionwide. And if the Court bases this right on common-law principles, it should incorporate common law limitations on relief. *See infra* pp. 13-14.

D. Respondents' Alternative Theories Lack Merit in Any Event

Respondents' alternative theories not only fail to justify the judgment below, they also lack support in history, treaty language, and precedent. If the Court decides to deviate from its normal approach and consider them, it should reject them.

1. Respondents' Alternative Theories Are Unsupported by History and Understanding

Respondents argue extensively that the common law supports inferring a prohibition on obstructions that substantially degrade a fishery. This Court has already held that "the 'right of *taking* fish' . . . had no special meaning at common law" and has criticized using it to interpret the Stevens

Treaties, because there is no indication "that these concepts were understood by, or explained to, the Indians. Indeed, there is no evidence that Governor Stevens understood them . . . ." *Fishing Vessel*, 443 U.S. at 678, 677 n.23. But if the Court considers these concepts, it should consider them fully, not the one-sided picture Respondents present.

Respondents emphasize that the common law generally prohibited obstructing rivers so that no fish could pass. But this general rule was subject to two exceptions relevant here.

First, if the barrier "be in reality a public benefit, it shall not be considered as an obstruction, nor punishable as such[.]" Humphrey W. Woolrych, *A Treatise of the Law of Waters* 205 (1853); *id.* at 208 ("When a great public benefit ensued from that which occasioned the abridgement of the right of passage, such an abridgment was not a nuisance, but proper and beneficial[.]"). Thus, a road built to benefit the public—including the Tribes—is not automatically a nuisance under the common law.

Second, "it is everywhere agreed, that this common right is liable to be modified and controlled by the municipal law of the land[.]" 3 James Kent, *Commentaries on American Law* 413 (2d ed. 1832); Joseph K. Angell, *A Treatise on the Law of Watercourses* 87 (1869). Given that the State adopted laws authorizing construction of the highways and culverts, and was in turn implementing a federal highway-construction program, there could be no common law violation.

Respondents also point to an 1848 federal statute prohibiting obstruction of salmon-bearing

streams in the Oregon Territory. At most that demonstrates an understanding that the government would regulate fish passage, not an eternal rule prohibiting all obstructions.

This example highlights the double-edged nature of Respondents' argument. Respondents claim that "interference with fish passage has been actionable for centuries" under the common law. Tribes' Br. 21. But if that is accurate, why would the Treaties have needed to address fish passage? And why have the Tribes and federal government never previously challenged a State culvert under the common law or the theory that Treaties incorporate the common law?

Respondents' argument also ignores the most concrete historical counter-example to their position: dams. Respondents now claim that the treaty parties understood that any obstruction that would substantially degrade a fishery would violate the Treaties. Yet for decades starting in the early 1900s, the federal government built or licensed dams across the Northwest that would have failed this test.[2] Today these dams provide most of the electricity in Washington, Oregon, and Idaho,[3] and irrigate thousands of farms in arid areas.[4]

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[2] *See, e.g.*, *Idaho ex rel. Evans*, 462 U.S. at 1020-21 & nn. 2-5; *City of Tacoma v. FERC*, 460 F.3d 53, 61-62 (D.C. Cir. 2006) (describing "devastating drop in the fish populations" caused by federally-licensed dam).

[3] https://www.eia.gov/state/?sid=WA; https://www.eia.gov/state/?sid=ID; https://www.eia.gov/state/?sid=OR.

[4] https://www.usbr.gov/projects/pdf.php?id=219.

Respondents suggest in footnotes that the dams "shed no light on the interpretive question" here because they were built or licensed after the Treaties were signed. U.S. Br. 40 n.2; Tribes' Br. 47 n.9. But they were built or licensed *by the federal government* while it was actively enforcing the Treaties in court. State's Opening Br. 36 (citing cases). They are thus strong evidence that the "practical construction adopted by the parties" did not impose the unwritten prohibition Respondents now claim. *Choctaw Nation of Indians v. United States*, 318 U.S. 423, 431-32 (1943). If Northwest dams were contrary to the parties' understanding and to common law, it is remarkable that Respondents have cited no case saying so. And the significant consequences that would flow from ignoring this history and adopting a rule that would render the dams treaty violations should give the Court pause.

Ultimately, Respondents seek to escape the district court's accurate conclusion that the parties did not intend "to write any protection for the [fish] into the treaty because nothing in any of the parties' experience gave them reason to believe that would be necessary." Pet.App. 269a. They cannot.

2. Respondents' Alternative Theories Are Unsupported by Treaty Text

Respondents offer three textual hooks for their alternative theories that the "right of taking fish" implicitly prohibits obstructions that substantially degrade fisheries. None is persuasive.

First, Respondents argue that because the Treaties "secure" the Tribes' fishing rights, they "preserved the Tribes' pre-existing 'right of taking

fish.'" U.S. Br. 23; Tribes' Br. 25. But that pre-existing right did not include a right to any minimum quantity of fish. Salmon harvests varied from year to year, and low harvests sometimes "caused near starvation." *United States v. Washington*, 384 F. Supp. 312, 351 (W.D. Wash. 1974). It also did not include a right to bar all obstructions, as tribes regularly erected weirs. J.A. 142a. And there is no indication, in the common law or elsewhere, that it would have included a right to prohibit obstructions built for a public purpose or with government approval, as detailed above. While the Treaties guaranteed important rights, they did not guarantee that the Tribes would always be able to fish in the same manner and to the same extent that they had historically. *See, e.g.*, State's Opening Br. 30-39; *Fishing Vessel*, 443 U.S. at 685, 670 (holding that Tribes are entitled to "a fair share of the *available* fish," rather than adopting Tribes' proposed rule that "the treaties had reserved a pre-existing right to as many fish as their commercial and subsistence needs dictated") (emphasis added); *Puyallup Tribe v. Dep't of Game of Washington*, 391 U.S. 392, 398 (1968) (holding that the Treaties did not guarantee "the manner in which the fishing may be done," and that the State could regulate "the size of the take" for conservation purposes).

Second, Respondents claim that the right of "taking" fish "preserved the Tribes' ability to actually harvest fish[.]" Tribes' Br. 26. But the Tribes are taking millions of fish annually regardless of the State's culverts. J.A. 247a. And as just explained, the Treaties did not guarantee a particular harvest level.

Finally, Respondents argue that the right of taking fish extends to "all" of the Tribes' historical fishing places, so they must be able to "take" fish at all of them. Tribes' Br. 26. But even if that is accurate, Respondents have not identified specific historic fishing places where State culverts prevent them from taking fish.

3. Respondents' Alternative Theories Are Unsupported by Precedent

Respondents argue that *United States v. Winans*, 198 U.S. 371 (1905), and *Puyallup Tribe, Inc. v. Department of Game of Washington*, 433 U.S. 165 (1977) (*Puyallup III*), support their alternative theories. Not so.

Winans involved a landowner who blocked Indians from entering his land to fish, even though it was a usual and accustomed fishing place, and who installed a "fish wheel" that caught all of the fish. *Winans*, 198 U.S. at 379-80. In enjoining this conduct, this Court applied two Treaty rights that are now well-settled: a tribal right of access to usual and accustomed fishing places, and a tribal right "to take a share of each run of fish that passes through tribal fishing areas." *Fishing Vessel*, 443 U.S. at 679; *see also id.* at 681 (explaining that *Winans* "assured the Indians a share of the fish"). Respondents claim that *Winans* established a different right: a right against "water-based obstructions." Tribes' Br. 28. But no language in *Winans* expresses such a right.

The Tribes point out that *Puyallup III* held that the State could regulate tribal fishing even within a reservation so that the tribe could not "completely destroy" the Puyallup River fishery and to protect

the non-Indians' right to a share of the fish run. Tribes' Br. 33. But nothing in the Court's language addressed obstructions or "substantial degradation." The recognition of a right to share the salmon runs and of power to prevent their destruction simply presaged application of the same principles in *Fishing Vessel*, 443 U.S. at 683 ("*Puyallup III* also made it clear that the *Indians* could not rely on their treaty right to exclude others from access to certain fishing sites to deprive other citizens of the State of a 'fair apportionment' of the runs.").

In short, no prior case adopts the theory Respondents propose here.

E. The Treaty-Based Protections the State Recognizes Differ Dramatically from Respondents' Alternative Theories

Respondents seek to minimize the novelty of their alternative theories by claiming they are identical to the State's recognition that no one can destroy the fisheries. U.S. Br. 37; Tribes' Br. 46-48. This is inaccurate.

The State has acknowledged two treaty-based protections for salmon, in addition to the many state and federal laws that protect salmon and the State's own strong incentives to protect salmon. Unlike Respondents' theories, both are narrow and grounded in precedent.

First, the State has acknowledged what *Fishing Vessel* said: that a court overseeing salmon allocation can "enjoin those who would interfere with" the res. *Fishing Vessel*, 443 U.S. at 692 n.32. This narrow power allows a court to enjoin acts that

threaten a salmon run with extinction, as in *United States v. Oregon*, 657 F.2d 1009, 1011 (9th Cir. 1981), when the Ninth Circuit enjoined a tribe from fishing one run during a year in which "precariously low numbers of that salmon were" returning and "the safe passage of every salmon was necessary to preserve the species." But Respondents have not alleged and could not plausibly allege that State culverts meet this standard.

Second, the State has acknowledged what this Court held in the *Puyallup* cases: State regulation cannot discriminate against the Tribes. As the Ninth Circuit explained in a later-vacated opinion in this case: "Reckless or malicious disregard for the effects of State projects on the fishery, leading to drastic decline in the available fish, very likely would be barred under the 'discriminatory regulation' standard of *Puyallup I*." *United States v. Washington*, 694 F.2d 1374, 1385 (9th Cir. 1982), *vacated*, 759 F.2d 1353 (9th Cir. 1985) (en banc). But here again, Respondents have not alleged that the State, in building culverts to federal design standards, acted with reckless or malicious disregard for the effects on fish. To the contrary, it was the State that first recognized—in the 1990's—that federal culvert designs could be inadequate for salmon. It was the State that voluntarily developed and adopted better designs for all projects going forward, and began the massive task of replacing old culverts. J.A. 101a, 315a-17a, 375a-78a, 385a-91a.

In short, the treaty-based protections the State acknowledges are far narrower than Respondents' theories, and could not justify affirmance here.

F. If the Court Orders Further Proceedings on Respondents' Alternative Theories, It Should Also Order Consideration of the State's Equitable Defenses

If the Court declines to reject Respondents' alternative theories outright, it should remand for consideration of the State's equitable defenses. Respondents defend the lower courts' dismissal of these defenses on three grounds. All fail.

First, Respondents ask this Court to apply case law prior to *City of Sherrill v. Oneida Indian Nation of New York*, 544 U.S. 197 (2005), and hold that equitable defenses are categorically unavailable against the government when it asserts long-dormant treaty claims. In effect, Respondents ask this Court to conclude that the result in *Sherrill* would have been the opposite if the United States had supported the tribe as a party, rather than as amicus. Nothing in *Sherrill* supports that theory, and the Second Circuit has repeatedly applied *Sherrill* to bar claims brought by the federal government, explaining that *Sherrill*'s reasoning is not limited to claims brought by a tribe, "but rather, that these equitable defenses apply to 'disruptive' Indian land claims more generally." *Cayuga Indian Nation of New York v. Pataki*, 413 F.3d 266, 278-79 (2d Cir. 2005); *see also Oneida Indian Nation of New York v. County of Oneida*, 617 F.3d 114 (2d Cir. 2010).

Moreover, unlike the pre-*Sherrill* cases Respondents cite, the State is not contending that actions of "individual government employees" bar the claims here. Tribes' Br. 49. Rather, Congress and federal agencies approved and encouraged the

building and design of these culverts. State's Opening Br. 17-18. Where, as here, a sovereign's claim is belatedly asserted, "longstanding observances and settled expectations are prime considerations," especially where the claim has "disruptive practical consequences" that "seriously burde[n] the administration of state and local governments." *Sherrill*, 544 U.S. at 218, 219, 220 (alteration in original).

Second, Respondents say it is unclear which equitable defenses the State "means to invoke." U.S. Br. 41. But the State has argued waiver since 2001. J.A. 86a-87a. Respondents now claim—for the first time—that waiver is not an equitable defense. U.S. Br. 41. If that is true, then the district court's justification for dismissing that defense—that equitable defenses are unavailable against the government—was clearly wrong, and remand is required. Pet.App. 274a-75a. Moreover, in *Sherrill* this Court considered the equitable defenses of laches, acquiescence, and impossibility even though they had not been briefed. *Sherrill*, 544 U.S. at 214 n.8. At the very least, the State should have been allowed to plead these defenses after *Sherrill*, but the district court refused the State's post-*Sherrill* request to reconsider its ruling on equitable defenses. *See* J.A. 7a.; Pet.App. 249a-72a.

Finally, Respondents argue that if the State is allowed to present its equitable defenses, they will fail. U.S. Br. 45-46. But the trial court dismissed the State's defenses at the pleading stage, which is appropriate only if the allegations are "unworthy of any consideration." 11A Charles Alan Wright et al., *Federal Practice and Procedure* § 1380

(3d ed. 2013). The State supported its defenses with detailed allegations about a wide range of federal actions, J.A. 73a-86a, which must be taken as true. The Court should not permit Respondents' one-sided portrayal of the facts to predetermine the merits.

G. The Court Should At Least Remand the Overbroad Injunction

Even if this Court accepts Respondents' argument that the Treaties bar obstructions that "substantially degrade" a fishery, it should vacate the injunction, which is not remotely tailored to that standard.

As detailed above, the district court used the State's list of "barrier culverts" as the basis for the injunction. Pet.App. 159a, 236a-37a. But when the State identified its "barrier culverts," it did not apply a "substantially-degrades-a-tribal-fishery" test. The State never analyzed whether the culvert affected a tribal fishery at all, and it included culverts that allow up to 90% fish passage. J.A. 299a. The district court did not and could not have found that all of the culverts on the State's list are "obstructions" that substantially degrade a tribal fishery. Instead, the district court said explicitly that it was "not limited in granting relief to requiring that culverts identified as blocking fish passage be repaired." Pet.App. 174a. Thus, under Respondents' own alternative test, the district court's findings are a "patently inadequate basis for a conclusion of systemwide violation and imposition of systemwide relief." *Lewis v. Casey*, 518 U.S. 343, 359 (1996).

Respondents offer a number of responses to this inescapable conclusion. None succeeds.

Respondents first claim that the State cannot challenge the injunction because it declined to propose a different one. Tribes' Br. 17, 59; U.S. Br. 18, 48, 52. But the State proposed detailed findings and conclusions after the remedy trial and argued that no injunction was needed. J.A. 26a. Respondents cite no authority requiring a party to propose an injunction to be entitled to one that respects constitutional limits and equity. "An injunction is a matter of equitable discretion; it does not follow from success on the merits as a matter of course." *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 32 (2008); *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 165 (2010) (same).

Respondents next offer a series of meritless arguments to justify forcing the State to replace its barrier culverts even if no fish can reach them because of non-State barriers.

- They argue that "non-state barriers tend to be highly clustered upstream from state-owned barriers," but they cite only a single example. U.S. Br. 49 (citing J.A. 97a). In reality, there are hundreds of non-State barriers downstream from State barrier culverts. *See, e.g.*, J.A. 397a (showing that in a sample of 315 State culverts, there were 220 non-State barriers downstream). The map at J.A. 285a, recreated at the end of this brief, shows one of many examples.
- They argue that non-state barrier culverts are irrelevant because many allow partial fish passage. Tribes' Br. 56-57; U.S. Br. 14-15, 18, 49. But so do half of the State culverts the district court ordered

replaced. J.A. 381a; *see* J.A. 285a, 309a-10a. Respondents' concession that partial fish passage may preserve fisheries doesn't defend the injunction; it undermines it.

- They point out that the State sometimes replaces culverts even when there are other barriers on the stream. Tribes' Br. 57. But that State policy choice does not render such culverts violations of federal law that a court can order replaced.

- They say it is equitable to order the State to correct its barriers surrounded by non-State barriers because "hundreds of non-state barriers [are] being corrected each year." U.S. Br. 50. But the chart they cite says nothing about how many non-State barriers are being replaced; it lumps together State and non-State barriers. J.A. 633a. And as to non-State barriers, the State is funding much of that work. J.A. 274a-75a.

Finally, Respondents misleadingly suggest that a drastic injunction was needed because "the number of known barrier culverts had in fact *increased*" from 2009 to 2011, "as new barrier culverts were being built faster than existing ones were being corrected." U.S. Br. 11. In reality, the number of barrier culverts listed increased *not* because the State built more, but because the State reassessed its existing culverts and identified more as barriers. Pet.App. 163a ("new barrier culverts have in fact been *identified* since 2009") (emphasis added);

J.A. 225a-26a (describing reassessment). This is evidence of the State's conscientiousness, not intransigence.

CONCLUSION

The judgment of the Ninth Circuit should be reversed.

RESPECTFULLY SUBMITTED.

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No. 17-269

In the Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.,

Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit

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INTEREST OF THE *AMICI CURIAE*

The American Forest & Paper Association (AF&PA) serves to advance a sustainable U.S. pulp, paper, packaging, tissue, and wood products manufacturing industry through fact-based public policy and marketplace advocacy.[1] AF&PA member companies make products essential for everyday life from renewable and recyclable resources and are committed to continuous improvement through the industry's sustainability initiative, *Better Practices, Better Planet 2020*. The forest products industry accounts for approximately four percent of total U.S. manufacturing GDP, manufactures over $200 billion in products annually, and employs approximately 900,000 men and women.

The National Mining Association (NMA) is the national trade association of the mining industry. NMA's members include the producers of most of the Nation's coal, metals, and industrial and agricultural minerals; manufacturers of mining and mineral processing machinery, equipment, and supplies; and engineering and consulting firms that serve the mining industry.

Amici's members depend on their ability to use the land for productive purposes, and on the supply of quantities of water necessary for their operations. Frequently—and in the forestry industry in virtually all cases—they also are holders of Clean Water Act (CWA or Act) permits: either Section 404 "fill" per-

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[1] Pursuant to Rule 37.6, *amici* affirm that no counsel for a party authored this brief in whole or in part and that no person other than *amici* or their counsel made a monetary contribution to its preparation or submission. All parties have provided written consents to the filing of this *amicus* brief.

mits, or Section 402 National Pollutant Dischange Elimination System (NPDES) permits that set forth permissible discharges to navigable waters from point sources based in part on water quality standards that "establish the desired condition of the waterway." *Arkansas* v. *Oklahoma*, 505 U.S. 91, 101 (1992). When a waterway fails to achieve water quality standards despite point source discharge limitations, the CWA may require that programs also address nonpoint sources of pollution, including various land uses.

Amici's interest in this case stems from the fact that the Ninth Circuit's invention of a treaty right to a sustenance quantity of fish, not merely a fair share of the available quantity of harvestable fish, threatens to ratchet up Clean Water Act and other environmental and land use restrictions on the operations of *amici*'s members. Guaranteeing a tribe the right to a quantity of harvestable fish sufficient to provide them with a "moderate living" has resulted in far reaching, arbitrary and unjustified changes to Washington's proposed statewide water quality standards. In particular, tribal fishing rights have become the basis for the U.S. Environmental Protection Agency's (EPA) imposition of Human Health Water Quality Criteria (HHWQC) based on hypothesized historical tribal fish consumption at exceptionally high and unrealistic levels—levels far beyond any genuinely anticipated fish consumption rate for the State. See, *e.g.*, EPA, *Revision of Certain Federal Water Quality Criteria Applicable to Washington*, 81 Fed. Reg. 85,417, 85,423 (Nov. 28, 2016) (imposing HHWQC standards on Washington based on the assertion that "the Stevens-Palmer treaties provide tribes the right to exercise subsistence fishing practices on waters throughout the State"). These strin-

gent criteria deprive the States of authority to manage their waterways as Congress intended and impose severe burdens on businesses and landowners.

The Ninth Circuit's reasoning is not limited to fishing rights; it can be extended to embed into federal law fixed-quantity hunting, gathering, pasturing, and similar rights that by the same reasoning must be secured to tribes through environmental and other land use requirements. Treaty language, under this interpretation, establishes a broad new "right to protection from environmental degradation." Kathryn A. Bilodeau, *The Implied Water Right for Fish: Do Off-Reservation Instream Water Rights Exist to Support Indian Treaty Fishing Rights?*, 48 Idaho L. Rev. 515, 545 (2012). As *amici* States have properly complained, it imposes a wide-ranging and free-floating "environmental servitude" on all the actions of the States and regulated communities. Br. *Am. Cur.* of Idaho et al. at 14. See Pet. App. 19a (the opinion below "fails to articulate a limiting legal principle that will prevent its holding from being used to attack a variety of development, construction, and farming practices").

Amici submit this brief to ensure that this Court is informed of these non-obvious but far-reaching—indeed revolutionary—consequences of the Ninth Circuit's misreading of the Stevens Treaties, which threaten State authority and every business and municipality that depends on a Clean Water Act permit or that uses the land in the Pacific Northwest and beyond.

SUMMARY OF ARGUMENT

This Court should reject the Ninth Circuit's interpretation of the Stevens Treaties because it is un-

supported by the language of the Treaties or by this Court's precedents. The proper reading of the Treaties is one that gives meaning to the limitation on the tribal "right of taking fish" that it exists "*in common with all citizens of the territory*." Treaty of Nisquallys (Treaty of Medicine Creek), art. III, 10 Stat. 1132, 1133 (Dec. 26, 1854) (emphasis added). The Ninth Circuit's reading granting tribes rights to certain harvestable quantities of fish instead of the fair share of available fish is flatly inconsistent with this Court's holding in *Washington* v. *Washington State Commercial Passenger Fishing Vessel Association*, 443 U.S. 658 (1979) (*Fishing Vessel*), and renders that limitation clause utterly meaningless.

In this brief, however, *amici* focus not on the Federal Indian canons of treaty interpretation and precedents of this Court that require reversal, but on the extraordinarily disruptive and harmful consequences of the Ninth Circuit's incorrect reading of the Stevens Treaties. We detail how the Ninth Circuit's mistaken reading converts tribal fishing rights into the driver for new and extremely stringent federal environmental regulations that are inappropriately designed with the sole goal of preserving, in perpetuity, sustenance quantities of harvestable fish for tribe members. Those consequences, which destroy the cooperative federalist scheme Congress established in the Clean Water Act and impose substantial burdens on "all citizens" that the Treaty parties could not conceivably have intended, show that the lower court's reading cannot possibly be correct.

ARGUMENT

Amici agree with petitioner the State of Washington that the language and intent of the Stevens Treaties, read in light of the Federal Indian canons

developed in this Court's jurisprudence, require reversal. *Fishing Vessel* requires not a fixed subsistence level of fish, but a fair share of available fish. Nothing in the Stevens Treaties—which grant the Tribes "[t]he right of taking fish * * * in common with all citizens"—requires that "all citizens" instead, and regardless of circumstances, ensure by all necessary means and at all times that the Tribes have a subsistence level of fish available to them.

Fishing Vessel is controlling here. It held that the Tribes' and citizens' rights of taking fish "in common" means that "[b]oth sides have a right, secured by treaty, to take a fair share of the available fish," which the Court construed as equal shares unless a tribe did not need fifty percent of available fish in order to make a "moderate living," in which case the Tribe's equal share might be reduced. 443 U.S. at 684-686.

The "moderate living" or subsistence standard that the courts below elevated to a minimum guarantee is therefore nothing of the sort. It is a cap that may lead to a reduction of a Tribe's share when fish are abundant. But when fish are scarce the controlling principle of division is a "fair share" of equal quantities. That, indeed, was the position urged by the United States in *Fishing Vessel*: the Tribes were entitled "to a 50% share of the 'harvestable' fish * * * or to their needs, *whichever was less.*" *Id.* at 670 (emphasis added). In accepting that argument, this Court *rejected* the Tribes' contrary contention that they had the right to "as many fish as their commercial and subsistence needs dictated." *Ibid.* Accordingly, the issue presented here was already decided in *Fishing Vessel*, which requires reversal. That decision recognizes no ambiguity in the Stevens Treaties

that would authorize looking to the extraneous evidence on which the Ninth Circuit relied. See *Choctaw Nation* v. *United States*, 318 U.S. 423, 432 (1943) (Indian treaties "cannot be re-written or expanded beyond their clear terms"). Cf. *CNH Industrial N.V.* v. *Reese*, No. 17-515 (Feb. 20, 2018) (summarily reversing a decision that relied on extrinsic evidence to interpret a contract after finding ambiguities that this Court's precedent foreclosed).

The State of Washington has set forth additional and compelling textual, historical, and precedential reasons why the Ninth Circuit's interpretation of the Treaties must be reversed. Rather than repeat those arguments, *amici* address here what the *consequences* of the Ninth Circuit's untethered and uncontained reading would be. Those consequences, we explain, are already in evidence in draconian federal regulations that destroy States rights and interfere with economic activity in the name of securing for Tribes subsistence fishing harvests.

THE NINTH CIRCUIT'S INCORRECT INTERPRETATION OF THE STEVENS TREATIES IS INCOMPATIBLE WITH THE CLEAN WATER ACT'S FEDERALIST STRUCTURE AND HARMS THE NATION'S ECONOMY

A. The Ninth Circuit's Misreading Of The Stevens Treaties Has Led To Stringent Clean Water Act Requirements That Destroy States' Rights And Burden Economic Activity

The Ninth Circuit's misinterpretation of tribal fishing rights under the Stevens Treaties leads to a serious distortion of the Clean Water Act that strips States of their rights and imposes huge burdens on

regulated parties. A description of the relevant portions of the Act is necessary to understand why.

1. The Clean Water Act aims to protect the Nation's waters through an elaborate "program of cooperative federalism." *New York* v. *United States*, 505 U.S. 144, 168 (1992). See 33 U.S.C. § 1251(a), (g). Although EPA has an important role in achieving the CWA's goals, Congress made clear its policy "to recognize, preserve, and protect the *primary* responsibilities and rights of States to prevent, reduce, and eliminate pollution" and "plan the development and use" of "land and water resources." *Id.* § 1251(b) (emphasis added).

Of particular importance here, States are responsible under the CWA for establishing water quality standards for waters within their borders. 33 U.S.C. § 1313(c)(1), (2)(A). Water quality standards "establish the desired condition of the waterway." *Arkansas*, 503 U.S. at 101. First, they identify the designated uses of the particular waterway, such as for industry, agriculture, silviculture, recreation, or public water supply, and "wherever attainable," should "provide water quality for the protection and propagation of fish, shellfish and wildlife." 40 C.F.R. §§ 130.3. Second, they specify water quality criteria necessary to serve those uses. 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. §§ 130.3, 131.10. The "primary role" in "establishing water quality standards" belongs to the States. *City of Albuquerque* v. *Browner*, 97 F.3d 415, 425 (10th Cir. 1996). Only if EPA disapproves a State's standards as being contrary to the Act may EPA promulgate standards for that State. 40 C.F.R. § 131.22.

2. The CWA's principal regulatory tool for achieving water quality standards is Section 402's NPDES

permit program, which applies to "point sources" of pollution. Subject to statutory and regulatory exceptions, a person who "discharges" a pollutant from a point source into "navigable waters" must have an NPDES or other Clean Water Act permit. 33 U.S.C. §§ 1311(a), 1342(f), (k), 1344(a). An NPDES permit imposes technology-based limits on effluent discharges from a point source. *Id.* §§ 1311(b)(1), 1342(a)(3). Where technology-based limits are insufficient to achieve water quality standards, permits must impose any more stringent limits necessary to implement those standards. *Id.* § 1311(b)(1)(C); *Arkansas*, 503 U.S. at 101. Most States are approved to administer the NPDES program within their borders. But EPA plays a supervisory role, with the ability to veto a State-issued permit. *Crown Simpson Pulp Co.* v. *Costle*, 445 U.S. 193, 194 (1980) (per curiam).

3. Non-point source pollution is all pollution that does not result from a discharge from a point source into a navigable water, such as unchanneled rainwater from agricultural sites that reaches a navigable water and contains chemical residue or sediment. The CWA does not authorize EPA to regulate nonpoint source pollution. *E.g.*, *Defenders of Wildlife* v. *EPA*, 415 F.3d 1121, 1124 (10th Cir. 2005). Instead, State programs required by the CWA address nonpoint source pollution to achieve water quality standards.

The Act requires States to establish a process to "identify, if appropriate, agriculturally and silviculturally related nonpoint sources" and to "set forth procedures and methods (including land use requirements) to control to the extent feasible such sources." 33 U.S.C. § 1288(b)(2)(F), (f). More general-

ly, States must identify any nonpoint sources that significantly contribute to a failure to meet water quality standards and develop best management practices to "reduce, to the maximum extent practicable," pollution from those nonpoint sources, subject to EPA approval or disapproval. *Id.* § 1329(b)(2)(C), (e)(h).

4. CWA Section 303(d) requires each State to identify those waters for which technology-based NPDES limits are insufficient to achieve water quality standards ("impaired waters"). 33 U.S.C. § 1313(d)(1)(A). The State must establish a "total maximum daily load" or TMDL for those pollutants causing the impairment. 33 U.S.C. § 1313(d)(1)(C). A TMDL defines the maximum level of pollutant loading from all combined sources, including natural background, point sources, and nonpoint sources, necessary to implement the applicable water quality standards. States have the responsibility for establishing TMDLs, which EPA must approve or disapprove. If EPA disapproves a State TMDL it must establish the TMDL itself. *Id.* § 1313(d)(2).

5. NPDES permit limits, nonpoint source best management practices, TMDLs—indeed the entire gamut of water pollution controls—thus stem from water quality standards established by the States under EPA supervision. But in one area, as we further elaborate in Part B, *infra*, EPA has been especially heavy handed in enforcing federally-mandated WQS, and doing so based on its view of tribal fishing rights.

EPA issues national recommended HHWQC under Section 304(a) of the CWA, which States use to develop their own human health-based criteria. States "are not required to adopt the national crite-

ria or use the identical default values that the EPA included in the equations to derive them. * * * [But if] EPA disapproves state criteria or determines that revised criteria are necessary, it can issue federal criteria for the state." Jerry Schwartz, *BNA Insights: Human Health Criteria, Fish Consumption Rates—More Important Policy Implications Than Clean Water Rule?*, 96 BNA Daily Environment Report 1, 2 (May 18, 2016) (citing, *inter alia*, 40 C.F.R. § 131.11(b)).

EPA establishes national recommended HHWQC "so that fish in the affected water body have levels of regulated pollutants low enough that when they are consumed by people * * * or are consumed by people who are also drinking the water * * *, they do not pose unacceptable health risks to those individuals." Schwartz, *supra*, at 2. These criteria, therefore, are based on assumptions about how much contaminated fish and water humans consume, and the risks that consumption at that level imposes. EPA's "formula includes several very conservative default values, including the fish consumption rate and the excess lifetime cancer risk (ELCR) level." *Ibid.* Specifically (and leaving aside EPA's extremely conservative ELCR assumptions), EPA's *base* criteria assume that everyone in the Nation:

- is of average weight;
- drinks 2.4 liters of unfiltered and untreated water from rivers, lakes, and streams every day for 70 years; *and*
- eats 22 grams of fish every day (including fish not from the waterbody for which the standard is being developed, such as store

> bought fish) for 70 years, all of which are contaminated at the criteria level.

Schwartz, *supra*, at 4. Twenty two grams of fish per day is more fish than is eaten by ninety percent of the U.S. population. *Ibid.*

But, as *amici* explain below, EPA has deemed even these conservative criteria insufficient to protect the health of members of Indian Tribes with fishing rights. In EPA's hands, the Ninth Circuit's interpretation of the Stevens Treaties to guarantee Tribes a subsistence level of fish operates through the CWA's complex system of water quality regulation to displace State authority to identify and achieve water quality standards. The end result is a set of unlawfully stringent HHWQC that drive point and nonpoint source regulation and TMDLs to levels that threaten the Nation's economic activity.

B. EPA Has Used Nonexistent Tribal Rights To Sustenance Levels Of Fish To Impose Stringent HHWQC On Unwilling States

The scheme of regulation described above means that higher WQS lead to more stringent NPDES discharge restrictions, greater nonpoint source controls, and more demanding TMDLs. Because of EPA's highly conservative HHWQC standards, fish consumption already is an especially potent factor in driving more demanding regulation. And elevated tribal fish consumption levels that EPA associates with sustenance fishing rights drive HHWQC to even more stringent levels.

1. In the State of Washington, EPA interpreted eight treaties (including the Stevens treaties at issue here) that govern 24 Tribes and "[t]he majority of waters under the jurisdiction of the State" to guaran-

tee the Tribes sustenance levels of fish. See 81 Fed. Reg. at 85,423. EPA disapproved 143 of Washington's HHWQC, substituting federal standards designed to "allow for the consumption of fish from local waters that could sustain and be protective of members of the [Tribes] practicing a subsistence lifestyle." *Id.* at 85,425. Those federal standards assume fish consumption by each Tribe member of 175 grams of inland fish per day (6.2 ounces every day for 70 years). *Id.* at 85,426.[2]

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[2] In February 2015, EPA also disapproved Maine's HHWQC for an unspecified set of tribal waters on the theory that Maine's criteria failed to protect a new EPA-created CWA tribal "sustenance fishing" designated use that EPA imposed on Maine in all tribal waters. See EPA, *Proposal of Certain Federal Water Quality Standards Applicable to Maine*, 81 Fed. Reg. 23,239, 23,241-42, 23,244-45 (Apr. 20, 2016) (describing EPA's February 2015 action). In subsequent rulemaking in response to those disapprovals, EPA promulgated new replacement HHWQC to implement its new "sustenance fishing" use in Maine's tribal waters. EPA derived those new HHWQC using an elevated fish consumption rate of 286 grams of inland fish per day (10.1 ounces every day for 70 years) based on historical estimates, which EPA postulated represents "present day sustenance-level fish consumption, unsuppressed by pollution concerns." *Id.* at 23,245-47. See also EPA, *Promulgation of Certain Federal Water Quality Standards Applicable to Maine*, 81 Fed. Reg. 92,466, 92,473, 92,480-81 (Dec. 19, 2016); *id.* at 92,479-80 (citing the Ninth Circuit decision in this case as support for EPA's new "sustenance fishing" protections and HHWQC in Maine).

Maine itself, however, has never adopted or submitted to EPA for review any such CWA "sustenance fishing" designated use for any waters or group, and is currently challenging EPA's February 2015 action. *Maine v. Pruitt*, No. 14-cv-264 (D. Me.). *Amici* support that appeal and disagree with EPA's imposition of a new CWA designated use of "sustenance fishing" on Maine, see 33 U.S.C. § 1251(b), and EPA's new interpretations of the

2. The State of Idaho, in establishing its HHWQC,

> chose a fish consumption rate of 66.5 g/d. That number represents the 70th percentile of the Nez Perce tribal consumption * * *. Idaho also only counted certain fish species, excluding most market fish from the rate based on information about Idahoans fish consumption. As Idaho DEQ stated in a presentation on its human health criteria, "it is reasonable to conclude that nearly all fish purchased in the market are marine fish or estuarine fish from outside of Idaho and that Idaho water quality standards will have little or no effect on their contaminant burden and risks to health in Idaho."

Schwartz, *supra*, at 5. Despite Idaho's careful analysis, EPA has not approved its criteria and has raised

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unique legal framework under Maine's state and federal Indian settlement acts. Maine's acts, however, are readily distinguishable from the Stevens Treaties here. Enacted in 1980, Maine's settlement acts reflect a comprehensive negotiated settlement of tribal claims to nearly two thirds of the State of Maine and resulted in the federal recognition of Maine's tribes, significant tribal funding, the extinguishment of all existing tribal land claims, and the redefinition of Maine's tribal-State relationship based entirely on the unique terms of those modern-day acts. See 81 Fed. Reg. at 23,241; *Maine* v. *Johnson*, 498 F.3d 37, 41-42 (1st Cir. 2007); *Aroostook Band of Micmacs* v. *Ryan*, 484 F.3d 41, 44-45 (1st Cir. 2007). Unlike in Washington, Maine has statewide environmental regulatory jurisdiction over all waters, including those in Indian lands. 81 Fed. Reg. at 23,241. In addition, EPA's new standards for Maine are limited to waters in or adjacent to Indian Lands, while the Washington WQS rule applies to waters under the State of Washington's jurisdiction, but not to any waters within Indian Lands.

a number of concerns with Idaho's HHWQC based primarily on EPA's tribal treaties theory.

3. The Ninth Circuit's flawed interpretation of treaty rights could have nationwide impact, for "at least 10 states have tribes with treaties similar to those at issue in Washington, and in total, 40 states are home to tribes with treaties." Schwartz, *supra*, at 4. Based on this misreading of the treaties, EPA has used HHWQCs to override State authority over the most basic local matters, such as the determination of a Tribe's realistic fish consumption rates, whether the Tribe's consumption has been suppressed by pollution, and whether Tribal members or other populations are the appropriate target population to use to assess HHWQCs. An EPA finding that denies States the freedom to address such site-specific issues leaves little substance behind the CWA's guarantee of State primacy, and even less behind the "cooperative" element of federalism upon which the statute was built.

4. In addition to this assault on State sovereignty, EPA acknowledges that "industries, stormwater management districts, [and] publicly owned treatment works" are all affected by the heightened discharge and other restrictions that flow from more stringent HHWQC. *E.g.*, 81 Fed. Reg. at 85,418. An expert analysis of HHWQC at the 175 grams per day consumption level used by the EPA in Washington State showed that the technology does not exist in the case of some pollutants to meet EPA's criteria (*e.g.*, for PCBs and arsenic), and that the cost of trying to implement HHWQC would run to hundreds of millions of dollars for Washington wastewater treatment facilities alone. HDR Engineering, *Treat-*

ment and Technology Revew and Cost Assessment (Dec. 2013).

Costs not involving treatment technology also will be immense, as attested to by the $1 billion plus bill that Washington taxpayers would face to satisfy the Ninth Circuit's injunction to replace culverts. And the non-point source and TMDL requirements and associated costs related to EPA's restrictive HHWQCs have not even been developed or analyzed. The expense and disruption of nonpoint source land use controls and TMDL limitations threatens to be enormous, not only for landowners but for communities trying to plan land use development and enhance tax revenues.

5. As if that were not enough, the Ninth Circuit's analysis is uncabined. EPA's ratcheting of WQS is almost certainly just the tip of the iceberg of new regulation and litigation designed to protect Indian subsistence rights. As Judge O'Scannlain recognized, if "any surface physical activity, wherever found, that negatively affects fish habitat [is] an automatic Treaty violation," then "the panel's opinion could open the door to a whole host of future suits." Pet. App. 28a (dissenting from denial of en banc review). Judge O'Scannlain observed that this "is already occurring," with threats to "logging, grazing and construction" to the fore. *Id.* at 28a-29a (citing Michael C. Blumm, *Indian Treaty Fishing Rights and the Environment: Affirming the Right to Habitat Protection and Restoration*, 92 Wash. L. Rev. 1, 29-31 (2017)).

Other programs in which federal regulators determine acceptable pollution levels, such as Superfund clean-ups of contaminated sites under the Comprehensive Environmental Response, Compensation and Liability Act, also are prime candidates for more

stringent regulation. And since animals and birds hunted on tribal lands are mobile, it is by no means farfetched to think that treaties as interpreted by the Ninth Circuit and EPA require States and landowners to protect their habitats and numbers outside of Indian lands as well. See, *e.g.*, Treaty of Nisquallys, *supra*, Art III (granting Tribe "the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed land"). The potential repercussions of the Ninth Circuit's faulty ruling across the Nation are little short of astounding.

None of this, however, should occur, for the simple reason that the Stevens Treaties, and the many treaties like them, do not promise Tribes a perpetual supply of fish at a sustenance level, but instead a share of available fish in common with other citizens. The practical consequences we have outlined show why that narrower interpretation, as this Court held in *Fishing Vessel*, must certainly be the correct one. Treaty parties could not possibly have imagined that they were imposing an environmental servitude on the Nation's non-Indian citizens that guaranteed Tribes fixed quantities of fish and other resources forever and regardless of circumstances, common sense, and the costs to our national economy.

CONCLUSION

The judgment of the court of appeals should be reversed.

Respectfully submitted.

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No. 17-269

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BRIEF FOR BUSINESS, HOME BUILDING, REAL ESTATE, AND FARMING ORGANIZATIONS AS AMICI CURIAE SUPPORTING PETITIONER

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INTEREST OF AMICI CURIAE*

Amici are organizations that represent businesses, home builders, real-estate professionals, and farmers in Washington State and around the country.

* No counsel for a party authored this brief in whole or in part, and no person other than amici, their members, or their counsel has made a monetary contribution intended to fund the preparation or submission of the brief. Petitioner has entered a blanket consent to the filing of amicus briefs, and letters of consent from respondents to the filing of this brief are on file with the Clerk.

The Association of Washington Business (AWB) is Washington State's Chamber of Commerce and the principal representative of the State's business community. AWB is the State's oldest and largest general business membership federation, representing the interests of approximately 8000 Washington companies who, in turn, employ more than 700,000 employees, approximately a quarter of the State's workforce. AWB's members are located in all areas of Washington, represent a broad array of industries, and range in size from sole proprietorships to large corporations that do business around the world.

The National Association of Home Builders (NAHB) is a Washington, D.C.–based trade association whose mission is to enhance the climate for housing and the building industry. Founded in 1942, NAHB is a federation of more than 700 state and local associations. About one-third of NAHB's approximately 140,000 members are home builders or remodelers, and they account for 80% of all homes constructed in the United States.

The Building Industry Association of Washington is the State's association of home builders and related companies that provide products and services for residential building construction and remodeling. It has 7800 members across the State.

The Montana Building Industry Association is a trade association founded in 1968 to promote and protect the building industry. It represents approximately 1500 builders and affiliated small businesses.

The Oregon Home Builders Association is the voice of Oregon's residential and light-commercial construction industry. It has nearly 3000 member companies repre-

senting more than 196,000 jobs and over $3 billion in the Oregon economy.

The Master Builders Association of King and Snohomish Counties is a trade organization of professional home builders and related professionals. With nearly 2800 member companies from all facets of housing construction, it is the largest local home builders' association in the United States.

Washington REALTORS® is a trade association of approximately 20,000 licensed real-estate brokers. It represents their interests, and those of Washington's homeowners and businesses, on a variety of issues affecting residential and commercial real estate.

The Washington State Farm Bureau is a voluntary, grassroots advocacy organization representing the social and economic interests of farm and ranch families in Washington State. It includes more than 47,000 member families.

The Idaho Farm Bureau Federation is a non-profit organization representing approximately 78,000 Idaho families. Its members live and work in each of Idaho's 44 counties and represent all commodities grown in Idaho. It includes a substantial number of livestock producers who graze on public lands.

The Montana Farm Bureau Federation is the State's largest agricultural organization, representing 30 county farm bureaus. It provides a voice for agricultural producers in legislative, legal, and other areas affecting agriculture.

The Oregon Farm Bureau is a grassroots advocacy organization founded in 1919 to represent the social and economic interests of Oregon's farming and ranching families in the public policy arena. It has farming and

ranching members in all 36 Oregon counties, with a total of 65,000 member families statewide.

This case presents the question whether treaties providing Indian tribes in the Pacific Northwest the "'right of taking fish, at all usual and accustomed grounds and stations'" also guarantee "that the number of fish [will] always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 86a, 94a (quoting *Washington* v. *Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 674, 686 (1979) (*Fishing Vessel*)). The Ninth Circuit answered that question in the affirmative. In so holding, it affirmed a sweeping injunction compelling the State of Washington to remove or replace highway culverts that allegedly impair salmon habitat and reduce the number of salmon available for tribal fishing. The court's reasoning is not confined to culverts but will affect land-use and water-allocation decisions throughout the West. Amici therefore have a significant interest in the resolution of this case.

SUMMARY OF ARGUMENT

This case involves the interpretation of treaties that Territorial Governor Isaac Stevens negotiated on behalf of the United States with Indian tribes in the Pacific Northwest in 1854 and 1855. All of the treaties contain similar clauses providing that "[t]he right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory." Treaty with the Nisqually (Treaty of Medicine Creek), art. 3, Dec. 26, 1854, 10 Stat. 1133. The Ninth Circuit held that "[t]he Indians reasonably understood Governor Stevens to promise not only that they would have access to their usual and accustomed fishing

places, but also that there would be fish sufficient to sustain them." Pet. App. 92a. For that reason, the court "infer[red] a promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." *Id.* at 94a (quoting *Fishing Vessel*, 443 U.S. at 686). Because the State's decision "to build and maintain barrier culverts under its roads" had "diminish[ed] the supply of fish," the court concluded that "in building and maintaining barrier culverts * * * Washington has violated, and is continuing to violate, its obligation to the Tribes under the Treaties." *Id.* at 95a-96a. It therefore affirmed an injunction compelling the State of Washington to spend billions of dollars removing or altering those culverts.

The Ninth Circuit's interpretation is contrary to the text of the treaties, which guarantee only a right to access "usual and accustomed grounds and stations" for the purpose of taking fish. At common law, fishing rights were understood to be interests in real property tied to particular locations, not rights in the fish themselves. Because fish were viewed as an inexhaustible resource, fishing-rights treaties ensured access to places where fishing could occur. There was no need to guarantee a particular quantity of fish. While the assumption of inexhaustibility proved incorrect, that does not authorize a court to insert into the treaties a guarantee that the parties did not negotiate.

The Ninth Circuit's decision is also contrary to prior interpretations of the treaties by this Court and by the political branches. Although this Court has construed the treaties several times, it has never suggested that they contain a guarantee of a particular quantity of fish. And Congress and the Executive Branch have repeated-

ly taken actions—most notably, constructing or authorizing dams that have wiped out entire fisheries—that are inconsistent with such a guarantee.

Finally, the Ninth Circuit's interpretation of the treaties raises serious federalism concerns. While the court's decision is nominally limited to highway culverts, its reasoning is far broader. If tribes have a right to ensure that States maintain a particular number of fish for tribal interests, then few activities in the West will escape judicial superintendence at the behest of tribes. The construction of culverts is not the only human activity that can harm salmon. Almost all land-use decisions affect fish habitat directly or indirectly, as does the withdrawal of surface or underground water under state-law water-rights regimes. Even if the treaty language were ambiguous, it should not be read to displace the State's traditional authority to regulate land use and water rights.

ARGUMENT

A. The Ninth Circuit's interpretation is contrary to the text of the treaties

In interpreting treaties, this Court "begin[s] with the text of the treaty and the context in which the written words are used." *Water Splash, Inc.* v. *Menon*, 137 S. Ct. 1504, 1508-1509 (2017) (quoting *Volkswagenwerk AG* v. *Schlunk*, 486 U.S. 694, 699 (1988)). For treaties with Indian tribes, as for of other kinds of treaties, "the starting point for any analysis * * * is the treaty language itself." *Minnesota* v. *Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 206 (1999). Here, the starting point should also be the ending point. The treaties all contain similar clauses providing that "[t]he right of tak-

ing fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory." Treaty of Medicine Creek, art. 3, 10 Stat. 1133. That language does not confer the right that the Ninth Circuit identified: "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a (quoting *Fishing Vessel*, 443 U.S at 686).

1. The treaties guarantee a "right of taking fish," and in the nineteenth century, "take," as applied to wild animals, had the same meaning it does today: "to get possession of (as fish or game) by killing or capturing." *Webster's Third New International Dictionary of the English Language* 2330 (1976); see also *Geer* v. *Connecticut*, 161 U.S. 519, 523 (1896); 2 William Blackstone, *Commentaries* 411 (1766). The treaties thus protect the ability to engage in the act of catching fish, an act that necessarily occurs at a particular place. By protecting the right to fish in "all usual and accustomed grounds and stations," the treaties guarantee access to those places for the purposes of fishing. Treaty of Medicine Creek, art. 3, 10 Stat. 1133. In doing so, they "impose[] a servitude upon every piece of land as though described therein," allowing Indians to access or occupy private property as necessary to fish at traditional fishing grounds, regardless of the ownership of those grounds. *United States* v. *Winans*, 198 U.S. 371, 381-382 (1905); see also *Seufert Bros. Co.* v. *United States*, 249 U.S. 194, 199 (1919).

Nothing in that right, which is tied to particular locations, suggests a power to regulate the non-fishing activities of the State in other locations. Such a power would be inconsistent with Article I of the treaties, under

which the tribes "cede[d], relinquish[ed], and convey[ed] to the United States *all their right, title, and interest* in and to the lands and country occupied by them." Treaty of Medicine Creek, art. 1, 10 Stat. 1132 (emphasis added). If the "right of taking fish" dictates how States are to manage road construction on State land, then the cession, relinquishment, and conveyance cannot reasonably be said to include "all the right, title, and interest" the Indians had to the ceded lands.

2. The Ninth Circuit suggested that a treaty provision limited to a right of access to traditional fishing grounds would have been "cynical and disingenuous." Pet. App. 91a-92a. That suggestion ignores the principle that treaty language "must be read in light of the common notions of the day." *Oliphant* v. *Suquamish Indian Tribe*, 435 U.S. 191, 206 (1978). Under the legal regime that prevailed at the time the treaties were signed, such a provision would have provided meaningful and important guarantees to the tribes.

During the nineteenth century, reservation Indians were sometimes prohibited from engaging in off-reservation travel. Some treaties explicitly restricted such travel. See, *e.g.*, Treaty with the Utah, art. 7, Dec. 30, 1849, 9 Stat. 985. The federal government often prevented Indians from leaving reservations without a permit. See, *e.g.*, U.S. Dep't of the Interior, *Sixty-First Annual Report of the Commissioner of Indian Affairs to the Secretary of the Interior* 24 (1892); U.S. Dep't of the Interior, *Fifty-Seventh Annual Report of the Commissioner of Indian Affairs to the Secretary of the Interior* 86 (1888). Similarly, some States enacted legislation prohibiting off-reservation travel without permits. See, *e.g.*, Act of July 20, 1858, ch. 44, § 2, 1858 Minn. Laws

104; Act of Feb. 27, 1845, ch. 80, § 10, 1845 Mo. Laws 578. By securing the right to access "usual and accustomed grounds"—many of which were off-reservation—the signatory tribes ensured that they would not be so restricted but instead would have the right "to leave the reservation whenever they choose" in order to fish. U.S. Dep't of the Interior, *Report of the Commissioner of Indian Affairs to the Secretary of the Interior* 50 (1863).

In addition, the treaties contemplated that the ceded lands might be sold to private owners, and they ensured that those owners could not impair access to fishing grounds. As this Court has recognized, by granting a right of access, "[t]he contingency of the future ownership of the lands therefore was foreseen and provided for; in other words, the Indians were given a right in the land—the right of crossing it to the river—the right to occupy it to the extent and for the purpose mentioned." *Winans*, 198 U.S. at 381. That "right was intended to be continuing against the United States and its grantees as well as against the state and its grantees." *Id.* at 381-382. The treaties thus ensured access to traditional fishing grounds regardless of property ownership.

3. The Ninth Circuit's interpretation also fails to take account of the treaties' language specifying that the right to fish is "in common with all citizens of the Territory." Treaty of Medicine Creek, art. 3, 10 Stat. 1133. The reference to a common right to fish drew on an established body of common-law fishing jurisprudence that informs the interpretation of the treaties.

At common law, the right of fishing was understood as an interest in real property. The right was associated with ownership of the land beneath or adjacent to the waters where it would be exercised, and it was a kind of

easement, severable from the ownership of the land and capable of being freely transferred. See 3 James Kent, *Commentaries on American Law* 329 (1828). In the case of navigable waters, the right of fishery was vested in the State as an incident of its ownership of the submerged lands under navigable waters. See *Idaho* v. *Coeur d'Alene Tribe of Idaho*, 521 U.S. 261, 284-287 (1997); *Shively* v. *Bowlby*, 152 U.S. 1, 57-58 (1894). That right was held by the State as a public trust. *Smith* v. *Maryland*, 59 U.S. (18 How.) 71, 74-75 (1855); *Martin* v. *Waddell's Lessee*, 41 U.S. (16 Pet.) 367, 413-418 (1842).

Three features of common-law fishing rights are particularly relevant here. First, common fishery rights on public waters were not exclusive. No one person or group of persons was entitled to exclude others or monopolize the fishery in waters subject to a common right of fishing. An exclusive right to fish was considered a "*private* right of fishery," and such rights were "confined to fresh water rivers." 3 Kent, *Commentaries* 331-332 (emphasis added). By contrast, "the right of fishing in the sea, and in the bays and arms of the sea, and in navigable or tide waters * * * is a right *public and common* to every person." *Id.* at 331-332 (emphasis added); see *id.* at 336.

Second, the right granted by the treaty, like all rights of fishery recognized at the common law, was attached to real property—the "usual and accustomed grounds and stations." But by its nature, such a right did not consist of an interest in the fish themselves. Cf. *Missouri* v. *Holland*, 252 U.S. 416, 434 (1920) ("Wild birds are not in the possession of anyone; and possession is the beginning of ownership."). The right therefore did not

establish a cognizable interest in activities outside the boundaries of the "usual and accustomed grounds."

Third, as a public right, the common right of fishery was subject to regulation by the State. See *Tarrant Reg'l Water Dist.* v. *Herrmann*, 569 U.S. 614, 631 (2013) (noting that the "power to control navigation, fishing, and other public uses of water, 'is an essential attribute of sovereignty'") (quoting *United States* v. *Alaska*, 521 U.S. 1, 5 (1997)); 3 Kent, *Commentaries* 332 ("[I]t is everywhere agreed, that this common right is liable to be modified and controlled by the municipal law of the land."). The State's regulatory authority over its fisheries included the power to limit the right to fish to its own citizens. *McCready* v. *Virginia*, 94 U.S. 391, 395 (1876). That power is critical in this context because, in 1855, reservation Indians were not treated as citizens. *Elk* v. *Wilkins*, 112 U.S. 94, 100 (1884); see Act of June 2, 1924, ch. 233, 43 Stat. 253 (extending citizenship to Indians). In the absence of the treaty guarantee, the State therefore could have prohibited reservation Indians from fishing altogether. By providing that the right to fish was to be held "in common with the citizens of the territory," the treaty prohibited States from discriminating against the tribes in its management of fisheries. *Mille Lacs Band of Chippewa Indians*, 526 U.S. at 205 (noting that the Court has "repeatedly reaffirmed state authority to impose reasonable and necessary nondiscriminatory regulations on Indian hunting, fishing, and gathering rights in the interest of conservation"). It did not guarantee any particular quantity of fish.

4. In a footnote in *Fishing Vessel*, this Court suggested that the "in common with" language did not refer to common-law fishery concepts. 443 U.S. at 677 n.23.

In reaching that conclusion, the Court reasoned that the United States had used similar language in fishing treaties with Britain, and that those treaties "gave each signatory country an 'equal' and apportionable 'share' of the take of the treaty areas." *Ibid.* Although the Court cited diplomatic correspondence concerning those treaties, the cited correspondence did not relate to an apportionment of the total number of fish, but only to ensuring equal access. See H.R. Exec. Doc. No. 84, 46th Cong., 2d Sess. 2 (1880) (describing "the alleged interference with American fishermen" who suffered "expulsion from [the] inshore fishery" in Fortune Bay, Newfoundland); 5 *American State Papers (Foreign Relations)* 528 (1823) ("The transactions which gave rise to this controversy occurred * * * when several fishing vessels of the United States, on the coast and within the strictest territorial jurisdiction of the island of Newfoundland, were ordered away.").

Because fish stocks were seen as an "inexhaustible repository," there was no reason for nineteenth-century treaties to guarantee a particular quantity of fish or even a particular share of the total catch, and fishing-rights treaties were not understood to do so. John Quincy Adams, *The Duplicate Letters, The Fisheries and the Mississippi* 185 (2d ed. 1823); see Lawrence Juda, *International Law and Ocean Use Management* 17 (1996) ("At least into the mid-nineteenth century, writers in the field of international law continued to reflect the view that the living resources of the oceans were inexhaustible."). It was much later, "as fishery technology became more sophisticated, and as total fishing effort continued to expand," that it became necessary to limit the total catch and apportion it among the participating

nations. Juda, *International Law and Ocean Use Management* 20. Only near the beginning of the 20th century did nations begin to sign treaties intended to regulate fishing in order to conserve—and apportion—a scarce resource. See, *e.g.*, Convention Between the United States and Great Britain for the Preservation of the Halibut Fishery of the Northern Pacific Ocean, Mar. 2, 1923, 43 Stat. 1841; Juda, *International Law and Ocean Use Management* 72 (explaining that the Halibut Convention "set a precedent for later agreements and constituted explicit recognition of the potential for commercial exhaustion of fish stocks"). The treaties at issue here, like other treaties of their era, were not aimed at resource conservation but at guaranteeing access to fishing grounds.

B. The Ninth Circuit erred in departing from the treaties' text based on its view of their purpose

A key premise of the decision below is that "[t]he Indians reasonably understood Governor Stevens to promise not only that they would have access to their usual and accustomed fishing places, but also that there would be fish sufficient to sustain them." Pet. App. 92a. Although the parties may have believed that the number of fish would be sufficient, it does not follow that the treaties contain a promise to that effect.

1. At the time the treaties were signed, the parties viewed salmon as an inexhaustible resource—an understandable view given the improbability of seriously depleting fish stocks using pre-industrial technology. As this Court has observed, "when the treaties were negotiated, neither party realized or intended that their agreement would determine whether, and if so how, a

resource that had always been thought inexhaustible would be allocated between the native Indians and the incoming settlers when it later became scarce." *Fishing Vessel*, 443 U.S. at 669. Because the parties assumed that fish would always be abundant, guaranteeing such abundance would never have occurred to them. They did not imagine a future in which new fishing, shipping, and canning technologies would eventually deplete fish stocks, nor did they consider whether development on the ceded lands might need to be constrained in order to ensure that enough fish would be available. Although the parties' assumption about the inexhaustibility of the salmon population proved incorrect, that is not a reason for a court to supply a missing term that the parties did not negotiate.

This Court has repeatedly held that the interpretation of a treaty is governed by its text, not by a court's speculation as to how the parties would have resolved other matters to which they "likely gave no thought." *Oklahoma Tax Comm'n* v. *Chickasaw Nation*, 515 U.S. 450, 466 (1995). Thus, as Justice Story explained, the Court may not "supply a *casus omissus* in a treaty, any more than in a law." *The Amiable Isabella*, 19 U.S. (6 Wheat.) 1, 71 (1821). Instead, it must "find out the intention of the parties by just rules of interpretation applied to the subject matter; and having found that, [its] duty is to follow it as far as it goes, and to stop where that stops—whatever may be the imperfections or difficulties which it leaves behind." *Ibid.*

In *Sale* v. *Haitian Centers Council, Inc.*, 509 U.S. 155 (1993), this Court applied that principle in concluding that the United Nations Convention Relating to the Status of Refugees, Jan. 31,1967,19 U.S.T. 6223, which pro-

hibits the expulsion of refugees, does not apply extraterritorially. The Court acknowledged that the parties to the Convention "may not have contemplated that any nation would gather fleeing refugees and return them to the one country they had desperately sought to escape," and that "such actions may even violate the spirit" of the Convention. *Id.* at 183. But it explained that "a treaty cannot impose uncontemplated extraterritorial obligations on those who ratify it through no more than its general humanitarian intent." *Ibid.*

The interpretive principle at issue is familiar in the context of statutory construction, which, like treaty construction, often entails interpreting a "compromise between groups with marked but divergent interests." *Ragsdale* v. *Wolverine World Wide, Inc.*, 535 U.S. 81, 93-94 (2002). In construing a statute, the Court's role is to apply the text, not to "to revise clear statutory terms that turn out not to work in practice." *Utility Air Regulatory Grp.* v. *EPA*, 134 S. Ct. 2427, 2446 (2014). Instead, the Court's "task is to apply the text, not to improve upon it." *Pavelic & LeFlore* v. *Marvel Entm't Grp.*, 493 U.S. 120, 126 (1989); accord *Lamie* v. *United States Trustee*, 540 U.S. 526, 538 (2004). As the Court recently explained, even when "the text as written creates an apparent anomaly as to some subject it does not address," a Court may not "disregard clear language simply on the view that * * * Congress must have intended something broader." *Michigan* v. *Bay Mills Indian Cmty.*, 134 S. Ct. 2024, 2033-2034 (2014) (internal quotation marks omitted). Thus, "while it is of course [the Court's] job to apply faithfully the law Congress has written, it is never [the Court's] job to rewrite a constitutionally valid statutory text under the banner of spec-

ulation about what Congress might have done had it faced a question that, on everyone's account, it never faced." *Henson* v. *Santander Consumer USA Inc.*, 137 S. Ct. 1718, 1725 (2017).

2. Those principles are fully applicable to treaties with Indian tribes. *United States* v. *Choctaw Nation*, 179 U.S. 494, 533 (1900) (citing *The Amiable Isabella*, 19 U.S. (6 Wheat.) at 71-72). The Ninth Circuit emphasized that a court construing an Indian treaty must "look beyond the written words to the larger context that frames the [t]reaty, including 'the history of the treaty, the negotiations, and the practical construction adopted by the parties.'" Pet. App. 89a (quoting *Mille Lacs Band of Chippewa Indians*, 526 U.S. at 196); accord *Fishing Vessel*, 443 U.S. at 675-676 (Treaties are to "be construed * * * in the sense in which they would naturally be understood by the Indians.") (quoting *Jones* v. *Meehan*, 175 U.S. 1, 11 (1899)). But even when construing Indian treaties, courts cannot alter treaty terms "to meet alleged injustices." *Northwestern Bands of Shoshone Indians* v. *United States*, 324 U.S. 335, 353 (1945). Courts cannot "by mere interpretation or in deference to [a] view as to what was right under all the circumstances, incorporate into an Indian treaty something that was inconsistent with the clear import of its words." *United States* v. *Choctaw Nation*, 179 U.S. at 532. "[E]ven Indian treaties," in other words, "cannot be re-written or expanded beyond their clear terms to remedy a claimed injustice or to achieve the asserted understanding of the parties." *Choctaw Nation of Indians* v. *United States*, 318 U.S. 423, 432 (1943). The Ninth Circuit erred in doing just that.

3. The Ninth Circuit relied on this Court's cases involving reserved water rights, which, it said, support reading the treaties as if they contained "a promise to 'support the purpose' of the Treaties." Pet. App. 93a-94a (quoting *Winters* v. *United States*, 207 U.S. 564, 577 (1908)). That reasoning reflects a misreading of the water-rights cases.

This Court has held that "when the Federal Government withdraws its land from the public domain and reserves it for a federal purpose, the Government, by implication, reserves appurtenant water then unappropriated to the extent needed to accomplish the purpose of the reservation." *Cappaert* v. *United States*, 426 U.S. 128, 138 (1976); see also *United States* v. *New Mexico*, 438 U.S. 696, 699-700 (1978); *Winters*, 207 U.S. at 576–577. To infer a reserved water right, the Court must "carefully examine[] both the asserted water right and the specific purposes for which the land was reserved, and conclude[] that without the water the purposes of the reservation would be entirely defeated." *New Mexico*, 438 U.S. at 700.

In all of the cases in which this Court has identified an implied water right, the right at issue has been associated with a federal land reservation. For example, *Winters* involved water rights appurtenant to the Fort Belknap Indian Reservation, where, without water, "civilized communities could not be established." 207 U.S. at 576. Similarly, *Cappaert* implied a right to an underground pool appurtenant to Devil's Hole National Monument, which had been set aside to preserve a "peculiar race of desert fish" that required the water to survive. 426 U.S. at 141; accord *Arizona* v. *California*, 373 U.S. 546, 596 (1983) (reservation of lands for Indian tribes

"reserved not only land, but also the use of enough water * * * to irrigate the irrigable portions of the reserved lands").

Here, instead of carefully examining the right and the "specific purposes for which the *land* was reserved" by the government, *New Mexico*, 438 U.S. at 700 (emphasis added), the Ninth Circuit inferred "a promise to 'support the purpose' of the *Treaties*" in general, Pet App. 93a-94a (emphasis added). The court concluded that a principal purpose of the treaties was to provide the tribes a means for support through an adequate supply of salmon. *Id.* at 91a. But the implied-reservation-of-water doctrine turns on the purpose of the reservation of land; it is not a license to engage in a broad inquiry into the purpose of the treaty as a whole. The Ninth Circuit's approach finds no support in this Court's cases.

C. The Ninth Circuit's interpretation is contrary to prior interpretations of the treaties by this Court and by the political branches

1. Although this Court has had several occasions to interpret the "right of taking fish" clause in the Stevens Treaties, it has never held that a state government must limit off-reservation land development to increase the number of available salmon. Instead, the Court has interpreted the treaties to provide a right of access to the tribes' usual and accustomed fishing grounds for the purpose of fishing. In *Winans*, for example, the Court held that the treaties "imposed a servitude upon every piece of land" used as a traditional fishing ground. 198 U.S. at 381. The Court has also held that the right of access cannot be made subject to the payment of a state license fee. *Tulee* v. *Washington*, 315 U.S. 681, 684

(1942). At the same time, the Court has recognized that the treaties leave an important role for state regulation. For example, in *Puyallup Tribe* v. *Department of Game of Washington*, 391 U.S. 392, 398 (1968), the Court held that "the manner of fishing, the size of the take, the restriction of commercial fishing, and the like may be regulated by the State in the interest of conservation, provided the regulation meets appropriate standards and does not discriminate against the Indians."

More recently, in *Fishing Vessel*, the Court stated that it would interpret the "right of taking fish" as guaranteeing a right to "some of the large quantities of fish that will almost certainly be available at a given place at a given time." 443 U.S. at 677-678. In other words, the Court read the treaties to "secure the Indians' right to take a share of each run of fish that passes through tribal fishing areas." *Id.* at 679. It ultimately concluded that the tribal share can be no more than 50%, subject to modification based on changing circumstances. *Id.* at 686-687.

As explained above, the decision in *Fishing Vessel* represented a departure from the treaty text, which guarantees only a right of access, not a particular share of the total number of fish. See *Puget Sound Gillnetters Ass'n* v. *United States District Court*, 573 F.2d 1123, 1134 (9th Cir. 1978) (Kennedy, J., concurring) (noting that "the rationale for the apportionment rule * * * remains somewhat obscure"), vacated, 443 U.S. 658 (1979). This case does not require the Court to reconsider *Fishing Vessel*, however, because even in that case the Court merely read the treaties to guarantee "a share of each run of fish," however large that run may be. 443 U.S. at 679. It did not hold that the State must ensure

that each run has a particular number of fish in it; still less did it interpret the treaty language to require the State to regulate activities unrelated to fishing in a certain manner because of indirect effects on fishing. In that respect, the Ninth Circuit's interpretation represents a major expansion of the right recognized in *Fishing Vessel*.

2. The Ninth Circuit's interpretation is also inconsistent with the construction given the treaties by the political branches. "While courts interpret treaties for themselves, the meaning given them by the departments of government particularly charged with their negotiation and enforcement is given great weight." *Kolovrat* v. *Oregon*, 366 U.S. 187, 194 (1961). The political branches can adopt an interpretation of a treaty not just through formal statements, but also through "their own practical construction of it." *Factor* v. *Laubenheimer*, 290 U.S. 276, 295 (1933). Here, the federal government's conduct shows that historically it has not maintained the treaty interpretation the Ninth Circuit adopted below.

As the State explains (Pet. Br. 8-9, 36), the federal government has taken many actions that have harmed salmon populations—most dramatically, building or licensing dams that have wiped out entire fisheries. See *Northwest Res. Info. Ctr., Inc.* v. *Northwest Power & Conservation Council*, 730 F.3d 1008, 1011 (9th Cir. 2013) ("[T]he extensive system of hydroelectric dams in the Columbia River Basin has been a major factor in the decline of some salmon and steelhead runs to a point of near extinction.") (internal quotation marks omitted). The effect of the dams on the salmon population was well understood at the time the dams were built. See, *e.g.*, B.M. Brennan, Director, Dep't of Fisheries, State of

Washington, *Report of the Preliminary Investigations Into the Possible Methods of Preserving the Columbia River Salmon and Steelhead at the Grand Coulee Dam* 3 (1938) (explaining that the Grand Coulee Dam "destroys the spawning grounds of the San Poil, Spokane, Kettle, Colville and Clark Fork rivers" and "eliminates 1,140 lineal miles of stream from the area available to the spawning fish"). Those activities therefore demonstrate that the political branches have adopted a "practical construction" of the treaties that does not prohibit development that adversely affects salmon populations. *Factor*, 290 U.S. at 295.

D. The Ninth Circuit's decision subjects the State to a poorly defined and intrusive obligation

The Ninth Circuit did not explain how to determine what constitutes enough salmon "available for harvest" that would be "sufficient to provide a 'moderate living' to the Tribes." Pet. App. 95a (quoting *Fishing Vessel*, 443 U.S. at 686). It is difficult to see how any court could do so. If the treaties guarantee a continuing right to enough fish to provide a moderate living, the required number of fish would vary with a tribe's population, with standards of living, with salmon prices, and with other income the tribe earned. What constitutes a moderate living could change from year to year, as could the number of fish required to maintain that standard of living.

The vagueness and unworkability of the approach adopted by the Ninth Circuit is itself a reason to doubt that the treaties mandate that approach. In addition, the breadth of the decision below raises serious federalism concerns because it intrudes on the State's traditional authority to regulate land use and water rights.

Those federalism concerns are an additional reason to reject the Ninth Circuit's interpretation. See *Bond* v. *United States*, 134 S. Ct. 2077, 2087 (2014).

The Ninth Circuit panel stated its holding in superficially narrow terms: "[W]e conclude that in building and maintaining barrier culverts Washington has violated, and continues to violate, its obligation to the Tribes under the fishing clause of the Treaties." Pet. App. 126a. And in the order denying rehearing, two judges from the panel described the court's decision as "[c]abin[ed] * * * [by] a careful, detailed description of the facts presented." *Id.* at 12a (W. Fletcher, J., and Gould, J., concurring in the denial of rehearing en banc). But the court's reasoning is in no way limited to that factual context, and the consequences of the decision will extend far more broadly. Barrier culverts are not the only obstacle to sustaining anadromous fish populations. Many human activities affect salmon runs, and therefore the Ninth Circuit's decision will affect far more than just culverts. It also threatens to displace state regulation of land use and water rights.

1. The U.S. Fish and Wildlife Service has determined that "[t]he biggest threat to salmon today is the loss and degradation of habitat." U.S. Fish & Wildlife Service, *Salmon of the West: Why are Salmon in Trouble?—Poor Habitat*, http://www.fws.gov/salmonofthewest/poorhabitat.htm. The decision below will therefore have implications for every land-use or development decision that could affect salmon habitat. That includes almost all development decisions, for as the Washington State Conservation Commission (WSCC) has explained, "[r]iparian zones are impacted by all types of land use practices." Carol J. Smith, Washington State Conserva-

tion Commission, *Salmon Habitat Limiting Factors in Washington State* 127 (2005). For example, the WSCC has determined that "[r]iparian functions are impaired by * * * direct removal of riparian vegetation, roads and dikes located adjacent to the stream channel, road crossings, agricultural/livestock crossings, unrestricted livestock grazing in the riparian zone, and development in the riparian corridor." *Ibid.* In addition, salmon can be harmed by "[h]uman-caused alterations in basin hydrology" resulting from "changes in soils, decreases in the amount of forest cover, wetlands, and riparian vegetation, and increases in impervious surfaces, sedimentation, and roads." *Id.* at 174. Thus, according to the WSCC, "[h]ydrologic impacts to stream channels can occur at relatively low levels of development." *Ibid.*

Federal, state, and local governments currently regulate development projects. During the permitting process, they require compliance with a host of environmental and land-use laws; thereafter, they require proper mitigation of environmental impacts. For example, the Clean Water Act prevents developers from dredging or filling navigable waters and wetlands without a permit and requires them to obtain permits for their stormwater runoff. 33 U.S.C. 1342(p), 1344. Washington State requires local governments to make land-use decisions based on adopted policies aimed at preventing or reducing impacts to fish habitats from development in critical areas or along shorelines. See, *e.g.*, Wash. Rev. Code §§ 36.70A.030(5), 36.70A.060(2) (requiring counties and cities to develop policies and development regulations to protect critical areas, including fish habitat); *id.* § 90.58.080 (directing local governments to develop shoreline master programs to regulate shoreline use and

modification); Wash. Admin. Code § 173-26-201(2)(c) (discussing importance of ecological functions of shorelines, particularly for anadromous fish, in development of shoreline master programs); *id.* § 173-26-231(2)(d) (requiring local governments to "assure that shoreline modifications individually and cumulatively do not result in a net loss of ecological functions," including fish habitat).

The Ninth Circuit's decision adds another layer of requirements—compliance with treaty rights—to the demands of federal and state law. Despite significant federal, state, and local regulation, the vast majority of land-development activities will affect stream flows, water quality, or salmon habitat to some extent by altering the natural state of the environment. Under the reasoning of the court below, those activities therefore have the potential to infringe a tribe's treaty right to enough fish to sustain a "moderate living," especially if they are assessed on a cumulative basis. Because the Ninth Circuit articulated no standards to limit the treaty right it identified, the extension of its decision to land-use regulation will be limited by little but the creativity of regulators and plaintiffs and the equitable discretion of the district court.

2. The Ninth Circuit's decision will also affect the diversion of surface water and the withdrawal of groundwater. Salmon require sufficient streamflows for adults to locate their natal streams, pass to their upstream spawning grounds, and spawn, as well as for juveniles to migrate to the ocean. See *National Wildlife Fed'n* v. *Nat'l Marine Fisheries Serv.*, 524 F.3d 917, 935 (9th Cir. 2008); *Pacific Coast Fed'n of Fishermen's Ass'ns* v. *Gutierrez*, 606 F. Supp. 2d 1122, 1135 (E.D. Cal. 2008). Indeed, streamflow is one of the "critical drivers of ju-

venile salmonid growth, movement, survival, and reproduction." Annika W. Walters, et al., *Interactive Effects of Water Diversion and Climate Change for Juvenile Chinook Salmon in the Lemhi River Basin (U.S.A.)*, 27 Conservation Biology 1179, 1180 (2013). Human-caused diversion of water from rivers and streams can lead to declines in salmon populations and has been found to have "substantially interfer[ed] with salmonid migration in the Columbia River Basin since the nineteenth century." Nathan Baker, *Water, Water, Everywhere, and at Last A Drop for Salmon? NRDC v. Houston Heralds New Prospects Under Section 7 of the Endangered Species Act*, 29 Envtl. L. 607, 619 (1999).

Following the Ninth Circuit's logic, just as the presence of barrier culverts on Washington roads would render "the Tribes' right of access to their usual and accustomed fishing places * * * worthless without harvestable fish," so too might insufficient streamflows. Pet. App. 93a-94a. Tribes therefore would have a treaty-based guarantee of a flow in streams and rivers sufficient to support a salmon population that is large enough to provide treaty Indians a "moderate living."

As noted above, this Court has held that "when the Federal Government withdraws its land from the public domain and reserves it for a federal purpose, the Government, by implication, reserves appurtenant water then unappropriated to the extent needed to accomplish the purpose of the reservation." *Cappaert*, 426 U.S. at 138; *Winters*, 207 U.S. at 576-577. But this Court has not applied the doctrine to infer a water right based on other treaty purposes not tied to reserved land. Applied to water rights, the Ninth Circuit's decision would extend beyond the narrow reserved-water-rights doctrine

enunciated by this Court. It would instead establish a much broader implied water right that is appurtenant not to a tribe's reservation but to all usual and accustomed fishing grounds.

Applied in that context, the decision below would severely undermine Washington's water-rights regime. Like most western States, Washington follows the prior-appropriation doctrine and the "first in time, first in right" priority system. That system is "founded on the idea that at some point the water in a stream or lake will be insufficient to satisfy all potential users, and that the rights of those who have already appropriated water to a beneficial use will be superior to any later appropriators." *Swinomish Indian Tribal Cmty.* v. *Washington State Dep't of Ecology*, 311 P.3d 6, 15 (Wash. 2013). Under Washington law, a senior water right is "entitled to the quantity of water appropriated by him, to the exclusion of subsequent claimants." *Postema* v. *Pollution Control Hearings Bd.*, 11 P.3d 726, 734 (Wash. 2000) (quoting *Longmire* v. *Smith*, 67 P. 246, 249 (Wash. 1901)); see also Wash. Rev. Code § 90.03.010 (codifying the "first in time, first in right" principle).

The Ninth Circuit has previously ruled that a tribally held reserved water right for aboriginal fishing uses would have a priority date of time immemorial. *United States* v. *Adair*, 723 F.2d 1394, 1414 (9th Cir. 1983), cert. denied, 467 U.S. 1252 (1984). Such a priority date has the potential to displace every other water right lawfully created and recognized under Washington law. If tribes have an implied reserved water right for enough streamflow to support a quantity of fish that would provide for a "moderate living" for each tribe in each of the tribes' usual and accustomed places, there may be no surface

water left in Washington to allocate to future users. Similarly, if there is not enough water to support the tribes' implied reserved water rights, then junior users whose rights infringe the tribes' water rights could see their perfected state-law water rights disappear.

CONCLUSION

The judgment of the court of appeals should be reversed.

Respectfully submitted.

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No. 17-269

IN THE

Supreme Court of the United States

STATE OF WASHINGTON, PETITIONER

v.

UNITED STATES OF AMERICA, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

BRIEF FOR CITIZENS EQUAL RIGHTS FOUNDATION AND CENTRAL NEW YORK FAIR BUSINESS ASSOCATION AS AMICI CURIAE SUPPORTING PETITIONER

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INTEREST OF THE *AMICI CURIAE*

The Citizen Equal Rights Foundation (CERF) was established by the Citizens Equal Rights Alliance (CERA). Both CERA and CERF are South Dakota non-profit corporations. CERA has both Indian and non-Indian members in 34 states. CERF was established to protect and support the constitutional rights of all people, to provide education and training concerning constitutional rights, and to participate in legal actions that adversely impact constitutional rights of CERA members. Central New York Fair Business Association (CNYFBA) is a member organization of CERA and is incorporated as a non-profit in Oneida, New York. CERF and CNYFBA are primarily writing this *amici curiae* brief to explain why the Ninth Circuit expansion of the federal reserved rights doctrine in this case exceeds the role of judicial review under the Constitution that was primarily designed to protect the individual rights of the people to self-governance at both the state and national level.[1]

CERF submits this *amici curiae* brief to add the perspective of its members that the Constitution should apply to all persons in the United States. CERF firmly believes that the United States government should be promoting the interests of all of its citizens on an equal basis. Accompanying this *amici curiae* brief is a letter to lodge two newly located historic documents with

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1 Pursuant to Rule 37.6 of the Court, no counsel for a party has authored this brief, in whole or in part. No person or entity, other than *amici curiae*, CERF, its members or its parent CERA's members including Central New York Fair Business, or its counsel have made any monetary contribution to the preparation or submission of this brief. Both parties have consented by letter to the filing of this *amici curiae* brief.

attachments CERF believes have never been seen by this Court. The memorandum "Respecting Federal Trust Responsibilities For Managing Indian Forests with Points and Authorities in Support" dated September 19, 1968 explains how William H. Veeder interpreted the Indian trust relationship created by this Court to alter separation of powers principles. Attached to this Memorandum is his synopsis of the Indian Trust Responsibility. The second memorandum is a comprehensive explanation with points and authorities from William H. Veeder that is the legal basis of the Nixon Indian policy. It is titled "Implementation of Memorandum Respecting American Indian Reservation Economic Development Retarded or Thwarted Through Abridgement or Loss of Indian Titles to Land and Rights to the Use of Water by Policies, Agencies and Personnel of the Federal Government." This very long memorandum dated May 14, 1969 explains how any physical thing that can be claimed for the Indians can be subjected to federal authority. Counsel will attempt to explain how these Memoranda by Veeder directly link to the fraud perpetrated on the Rio Grande fully discussed in the *amici curiae* brief submitted to this Court in support of the pending petition in *Sturgeon v. Frost*, Docket No.17-949 that initiated all of the federal reserved rights claims.

SUMMARY OF THE ARGUMENT

This case is about the latest expansion of federal reserved treaty rights established in *United States v. Winans*, 198 U.S. 371 (1906). The very authority to interpret and continually reinterpret the treaties at issue over time comes from this Court's decision in

Worcester v. Georgia, 31 U.S. 520 (1832). CERF and CNYFBA assert that this Court did not have jurisdiction to take the case of *Worcester v. Georgia* under either its appellate or original jurisdiction and render a decision. CERF and CNYFBA take this position as the alternative means to correct the creation of the federal reserved rights doctrine. This Court can always correct its jurisdiction. The assertion of equity jurisdiction in the Supreme Court to create a specific federal trust relationship with Indian tribes created law that violates separation of powers and federalism. This Court never should have taken upon itself the authority to force the elected branches to act specifically to protect any one class of people against all others.

The "trust relationship" established over the Indians in *Worcester* and the national interest to protect the navigation servitude became the basis of the federal reserved rights doctrine in *United States v. Winans*, 198 U.S. 371 (1906) and *Winters v. United States*, 207 U.S. 564 (1908). The doctrine was established through deliberate fraud on the Rio Grande as evidenced by two legal memoranda written by attorneys of the United States Department of Justice. It was this fraudulent doctrine that was then turned into an absolute weapon against the States and the people by William H. Veeder to become what is now known as the Nixon Indian policy. Again CERF relies on the actual memoranda written by Veeder to make its assertions.

The control of the legal arguments regarding the Indians demonstrates there is a Madisonian faction of federal attorneys that knows all of the facts and history but does not disclose this information to the federal courts when presenting arguments. This Court can end this faction by curtailing its equity jurisdiction that

opened a separate Indian trust in the first place.

ARGUMENT

CERF does believe that it is easier to articulate the concerns against the federal reserved rights doctrine in a water case than in a land case. The reason for this is the way the public trust doctrine was defined as a matter of separation of powers in *Pollard's Lessee v. Hagan*, 44 U.S. 212 (1845) and other old water cases. Because of the large waterways and extensive coastline in the Eastern states the division of authority over the waterways was considered and defined long before our Civil War. The early water decisions were also some of the earliest Commerce Clause decisions. This case is the result of the Ninth Circuit choosing to again expand the fraudulently made federal reserved water rights doctrine.

I. IS THIS COURT WILLING TO STEP UP AND CORRECT ITS OWN MISTAKE?

The law we inherited from Great Britain completely separated the war powers from the domestic law. Either an area was under military jurisdiction or it was under civil jurisdiction. This was the most direct way to prevent the government authority to wage war from influencing or affecting the domestic authority to promote self-governance. In Great Britain this distinction was of particular importance because the domestic courts were separated into courts of law and courts of equity. All of the Colonies prior to the Revolutionary War were classified as British territories under military jurisdiction. Your individual status was determined by where and to

whom you were born as designated by British law. Under British law today there is still no legal means to judicially transition those born under the territorial military status of a Colony to becoming equal in status to those born within the British Isles. It is a primary tenet of British law that equity does not apply to any military proceeding convened under the direct authority of the sovereign government. British law establishes different types of British citizenship depending on where and to whom you were born. But Britain has also expanded the role of its domestic courts to hear both civil and military crimes. By placing the same judges and tribunals to decide the distinct types of law, the courts and the people are constantly reminded of the differences between military and civil statutes and the need to keep them separated. The application of Civil statutes including the criminal laws are still subject to interpretation using principles developed in the equity courts and the equitable defenses. Great Britain and most of her former colonies have managed to preserve their individual rights as their system of governance has designated by keeping the war powers and domestic powers separated. Britain has found a workable separation of powers balance that has preserved individual liberty under their system. According to the two Veeder Memoranda and the decision of the Ninth Circuit that will bankrupt the State of Washington in this case, the United States has utterly failed to keep the domestic laws and war powers separated in the federal courts.

Defining and limiting the authority to wage war was seen by the Framers as one of the most difficult problems in designing the structure of the Constitution. One of the most prominent members of the Constitutional Convention, George Mason of Virginia,

refused to sign the finished Constitution because he did not believe the document contained enough restriction on the federal authority to wage war given the slavery and Indian situations. These groups were situations because they were not "white." The authority to classify slaves as 3/5ths human and Indians not taxed as separate required treating them as potential enemies using military authority. These clauses also deliberately intermix the authority to wage war and the civil authority in order to create an opportunity for all people to become equal. From the beginning our Framers rejected the old British absolute classifications of an individuals status being decided at birth and attempted to create something new. Every person was to be allowed to employ their own talents to achieve whatever they made possible through their own work no matter whether they were born a slave, an Indian or an aristocrat. Even as slavery became the main cause of the Civil War the quest for equal protection or equal justice under the law grew as a principle and became the backbone of the Civil War Amendments.

The Framers of our Constitution because of this distinction in fundamental rights between the application of domestic and territorial law specifically required that Congress "dispose of the territories." Property Clause, Art. IV, Sec. 3, Cl. 2. This requirement to dispose of the territory and create new States was defined by this Court as allowing the United States to retain territorial land only on a temporary basis in a case that determined that States owned the bed and banks of a navigable waterway. *See Pollard's Lessee v. Hagan*, 44 U.S. 212, 221 (1845). The specific requirements set in that case became known as the American public trust doctrine. The public trust doctrine was meant to prevent the United States from

being able to use the territorial war powers as permanent domestic law against the States and individuals. The main concept was that the federal government could exercise plenary power over a territory but that upon the formal creation of the territory by Congress certain powers and ownership over the water would vest in the future state. This insured that all States would be admitted on an equal footing with the existing states. Before the Civil War Amendments and the end of slavery this was the only way to enforce the Framer's view that all people had to be equal before the law.

This discussion must also include how the Constitution itself divided the authority of deciding citizenship. The Constitution gave Congress the authority to create laws to naturalize all foreign persons that were not citizens of the States in which they resided. The Thirteenth Amendment forever banned slavery and involuntary servitude. The Fourteenth Amendment created national citizenship and deliberately withheld citizenship from all Indians not taxed.[2] This exception to what has otherwise become an inviolable principle of equal protection exists because this Court asserted it had appellate jurisdiction under principles of equity to deliberately oppose the elected branches in 1832 in *Worcester v. Georgia*.

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2 See Act of April 9, 1866, 39th Cong., Sess. 1, ch. 31 1866) (The "Act to protect all Persons in the United States in their Civil Rights, and furnish the Means of their Vindication" (approved April 9, 1866), declared that "all persons should be deemed citizens of the United States who were born in the United States, and not subject to any foreign power (excluding only Indians not taxed), including persons of every race and color, without regard to any previous condition of slavery or involuntary servitude...").

The Framer's did not know how the only Court specifically created under the Constitution, this Supreme Court, was going to function and deliberately left the creation of the federal judiciary and the rules of procedure to Congress and the courts themselves to work out. Article III, Section 2 sets out only the most basic jurisdictional requirements for actual cases or controversies before this Court. This Court is also declared to have both law and equity authority. The British blood punishment of Bill of Attainder was prohibited. Judicial review of laws is not even mentioned. It was left to Congress and the federal courts created by Congress to work out the details. Because Congress is supposed to set the laws that establish the jurisdiction of all federal courts except the Supreme Court itself, there is a tension between Congress and the Supreme Court over how to separate the powers over federal court jurisdiction. This tension was just examined by this Court in the case of *Patchak v. Zinke*, Docket No. 16-498 (Decided February 27, 2018).

The majority of the Framers believed that this deliberate intermixing of war and civil authorities was acceptable because they had designed a national government that made permanent the civil liberties and would require all "war or emergency" designations to be "temporary." They specifically applied this temporary versus permanent restriction in the Property Clause, Art. IV, Sec. 3, Cl. 2., to limit the federal authority to keep an area indefinitely under military jurisdiction by requiring the Congress to dispose of the territory. The Framers had also learned from British experience that government ownership of real property created jurisdictional issues and deliberately created the separate Enclave Clause for

this reason. Similarly, they understood from British law that government ownership also implicated commercial activities that touched upon or used government property and separated commerce from the ownership interests. These and other specific separation of power and checks and balances constraints were built into the Constitutional structure to prevent the war powers from being used as domestic authority. The Framers thought they had created a limited national government subject to a written statement of its authorities. In a separate Bill of Rights they imposed even more limitations on the national government and specifically reserved to the States and primarily the people all those powers not specifically conferred to the national government.

The Framers and this Court underestimate the power of the written constitution. The Framers debated whether and how judicial review would develop. Allowing principles of equity in the federal courts to fill in gaps in interpreting the constitution with its amendments, civil rights statutes and to protect specific liberty interests against the national government has worked. *Marbury v. Madison*, 5 U.S. 137 (1803) itself is just such a decision. The Court declared a law unconstitutional to resolve the case. What has not worked is when this Court using its equity authority has declared the law without any written constitutional provision or statute as its foundation. There is no worse example of this than the *Dred Scott v. Sandford*, 60 U.S. 393 (1857) decision in which the Chief Justice declared every contested written provision of the law unconstitutional to then create an equitable remedy for slave owners in all federal territories. CERF has many times explained to this Court how *Dred Scott v. Sandford* is the true

source of this unaccountable plenary power that is now supplanting all due process and liberty. The *Dred Scott* ruling lives on because *Worcester* is still the law.

That general judicial equity power was initially rejected in *Cherokee Nation v. Georgia*, 30 U.S. 1 (1831). Chief Justice Marshall refused to exercise it to engage in the review of the injunction then sought to preserve the Cherokee Nation's treaty right to occupy territory within the State of Georgia over which the United States asserted title, which this Court previously acknowledged in *Johnson v. M'Intosh*, 21 U.S. 571 (1823), because it would potentially be tantamount to recognizing "the existence of nations and States [...] possessing [aboriginal] dominion and jurisdiction *paramount to* the Federal and State Constitutions" (emphasis added) 30 U.S. at 49-50. The Court's general judicial equity power was, thereafter, first created in *Worcester v. Georgia*, 31 U.S. 520 (1832). In apparent deference to Justice Johnson's earlier dissent in *Cherokee Nation*, 30 U.S. at 69-70, Chief Justice Marshall proceeded to deliberately oppose the elected branches of government and to declare a federal trust relationship with the Cherokee Nation. Counsel is not going to get involved in discussing the Removal policy of 1830 or what led Chief Justice Marshall to make such a bold step. Counsel is only interested in what this judicially declared federal Indian trust relationship has become according to William H. Veeder and the federal attorneys who manufactured the federal reserved rights doctrine on the Rio Grande. This Court's decision in *Worcester v. Georgia* is unquestionably what breaks the written safeguards that were so carefully designed by the Framers to prevent the war powers from interfering with domestic law.

The *Worcester* opinion adopted the concepts of protection and trusteeship as more than "a mere moral responsibility." Chief Justice Marshall applied the law of nations as explained in the treatise of contemporary international law expert Emer de Vattel ("Vattel").[3] *See also United States v. Rogers*, 45 U.S. 567, 572 (1846) (referring to them as in "the spirit of humanity and justice"). In *Worcester*, this Court exercised its equity powers to acknowledge such responsibility as having been fulfilled previously by the British Crown in North America, and as having been thereafter inherited and assumed, initially, by the American colonies in the context of "defensive war," and ultimately, by the newly formed United States government following the Revolutionary War. *Worcester*, 31 U.S. at 543-551. Indeed, in *Worcester*, this Court cited Vattel's treatise as the basis for concluding that Indian tribes or bands could be considered 'sovereign' nations or states able to enter into enforceable treaties with independent sovereigns so long as they retained one facet of sovereignty – political and administrative self-governance. *Rogers*, 45 U.S. at 572; Vattel at 349-354. This Court construed these indicia as evidencing the dependent 'ward' status of the tribal nations to the United States.

This Court made the law in *Worcester v. Georgia* that completely separates the Indians from the rule of

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3 *See* Emir de Vattel, *The Law of Nations; or Principles of the Law of Nature, Applied to the Conduct and Affairs of Nations and Sovereigns*, Lieber Collection (Philadelphia: T. & J.W. Johnson, Law Booksellers (1844)); Emir de Vattel, *The Law of Nations, Or, Principles of the Law of Nature, Applied to the Conduct and Affairs of Nations and Sovereigns, with Three Early Essays on the Origin and Nature of Natural Law and on Luxury* (Liberty Fund, 2008).

law established under the Constitution. In exercising its equity powers to adopt an Indian trust standard based on the law of nations this Court created and maintains the ultimate right of deciding how to interpret the federal trust relationship with the Indians and tribes. The *Worcester* Court found that Indian treaties executed by the United States are "the supreme law of the land" (Art. VI, Cl. 2) intentionally limiting federalism for the benefit of the Indian tribes. This Court in *Worcester* classified the status of the ground occupied by the Cherokee Nation in Georgia as federal Indian country breaking every written safeguard imposed in the Constitution and by statute under domestic law to prevent the war powers from being applied generally. These pre-Civil War cases laid the groundwork for this Court to authorize further federal government activities that displace constitutionally protected private property rights and State processes in favor of the aboriginal water, fishing and hunting rights of Indian tribes as the culvert case at bar amply demonstrates. [4] When Congress ended the treaty making era with the Indian policy of 1871, instead of this Court repealing the application of the law of nations to the Indians it decided that Congress could exercise plenary authority over them. This Court created the extra-constitutional authority over the Indians and then effectively delegated it to Congress in perpetuity. According to the memoranda cited in the next section of this brief, it took only a few years for attorneys working in the Executive branch to realize

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4 *See e.g., Baley v. United States*, 1-591-L (Fed. Cl. 2017), slip op. at 2, 16-17, 19-21, 45-46, 60-65, 70-74; The Kogan Law Group, P.C., *Summary of Write-ups for Western States Constitutional Rights, LLC* (2016).

how this Court lifted every constitutional restriction so that the United States could claim it had reserved rights to every interest ever granted or conferred.

Today all of the constitutional constraints on government power are irrelevant because this Court has failed to enforce them for more than a hundred years. This is what has happened to Mr. Sturgeon and is now happening to the State of Washington. Both have been blindsided by this asserted federal authority that claims the federal government can change the underlying basis of what law applies to the waterways and land to alter our rights. This Court is the only branch of government that can correct the mistake it made and declare anew that the power to alter the land status or avoid the application of equal protection can only be changed on a temporary basis for a real emergency like invasion or a major terrorist attack or natural disaster.

II. THE FRAUDULENT DOCTRINE OF FEDERAL RESERVED WATER AND TREATY RIGHTS.

A. The Fraud on the Rio Grande

After the Civil War, Congress changed federal Indian policy. The 1871 policy ended treaty making with the Indian tribes, and instead, "governed them by acts of Congress." *See* Act of March 3, 1871, ch. 120, ch. 120, § 1, 6 Stat. L. 566; *United States v. Kagama*, 118 U.S. 375, 382 (1886). This formally ended the assimilation policy of the Northwest Ordinance and began a much harsher and more expansive direct war power policy toward the Indians. *See* 25 U.S.C. § 71, Rev. Stat. § 2079; 43 U.S.C. § 1457 and § 1458, Rev.

Stat. § 441 and § 442. *See also U.S. v. Lara*, 541 U.S. 193, 201 (2004). The separate racial classification of "Indian" from *Dred Scott* v. *Sandford*, 60 U.S. 393 (1857) was deliberately preserved in the Indian Policy of 1871 as codified in the Revised Statutes of the Reconstruction era. The Indian policy of 1871 was based on simultaneous but seemingly inconsistent presumptions that, although "Indian tribes ha[d] ceased to be treaty-making powers and ha[d] simply become wards of the nation,"[5] Indians and Indian tribes would continue to be "recognized [...] in their tribal relations" and thus, as possessing the "rights and privileges" of potential (rather than actual) "belligerents" against the authority of the United States. 25 U.S.C. § 71, Rev. Stat § 2079.[6]

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5 *See* 3 Fed. Stat. Ann. (2d Ed.) 770 ("**Future Treaties with Indian Tribes** [...] **Relation of Indian Tribes to United States** – The Act of March 3, 1871, did not change the relation of the Indian tribes to the United States, but only changed the method of enacting laws for their government. *Ex. P. Morgan*, (1883) 20 Fed. Rep. 306. Since that Act the Indian tribes have ceased to be treaty-making powers and have simply become wards of the nation. *Brown v U.S.*, (1897), 32 Ct. Cl. 432.")

6 *Id.* ("**Future Treaties with Indian Tribes** [...] **Indians entitled to rights of belligerents.** – Congress has authority to govern the Indians by statute, instead of by treaty, but, having recognized them in their tribal relations until the Act of 1871, and by that Act declared that no obligation of any treaty made prior thereto should be thereby impaired, they are entitled, at least until otherwise provided by law, to the rights and privileges of belligerents, and the use of the word 'amity' in the statutes is, in effect, a recognition of such rights. *Leighton v. U.S.*, (1894), 29 Ct. Cl. 304. *Cf.* 25 U.S.C. § 72 ("**Abrogation of Treaties** - Whenever the tribal organization of any Indian tribe is in ***actual hostility*** to the United States, the President is authorized, by proclamation, to declare all treaties with such tribe abrogated by such tribe if in his opinion the same can be done consistently with good faith and legal and national obligations. (R.S. §□2080)") (emphasis added).

This change happened because so many Indian tribes raised hostilities during the Civil War. Many Indian tribes formed alliances with the Confederate States. *See Holden v. Joy*, 112 U.S. 94 (1872). This codification of the Reconstruction power over Indians preserved the territorial war powers used in "Indian country" to fight the Civil War and to Reconstruct the Southern states following the war.[7] *See also* War Powers by William Whiting (43rd edition) p. 470-8. This was exactly what Secretary of War Edwin Stanton argued for to forever prevent another civil war. Under the 1871 policy even if an Indian left the reservation of territorial land made for his tribe and resided in town as a member of American society, he was deemed to be under the complete authority of Congress as an

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7 *See* 3 Fed. Stat. Ann. (2d Ed.), *supra* at 806 ("'Indian country.' – Section 1 of the Act of June 30, 1834, ch. 161, 4 Stat L 729, was repealed by the Revised Statutes, and consequently the description of the Indian country found in that section is no longer a part of the law of the land. *U.S. v. Bridleman*, (1881) 7 Fed. 894; *Forty-three Gallons Cognac Brandy*, (1882) 11 Fed. 47. But the section may still be referred to for the purpose of determining what was meat by the term 'Indian country' when found in the sections of the Revised Statutes of the Act of 1834. *U.S. v. Le Bris*, (1887) 121 U.S. 278, 7 S.Ct. 894, 30 U.S. (L. ed.) 946. 'Indian country,' as used in the Revised Statutes, applies to all country to which the Indian title has not been extinguished within the limits of the United States, even when not within a reservation expressly set apart for the exclusive occupancy of Indians, except that within the boundaries of states, and it is embraces all territory within the boundaries of states, actually occupied by Indians and excluded by statute or treaty from state jurisdiction *Ex p. Crow Dog*, (1883) 109 U.S. 556, 3 S. Ct. 396, 27 U.S. (L. ed.) 1030; *Benson v. U.S.*, (1890) 44 Fed. 178 (1911) 29 Op. Atty.-Gen. 239" (emphasis added). Since the New Deal and World War II, however, the term "Indian country" has reappeared within the federal statutory framework. *See* 18 U.S. Code § 1151.

undomesticated person not capable of exercising the responsibilities of a citizen. Only Congress could change his status and grant citizenship *See Elk v. Wilkins*, 112 U.S. 94 (1884).

By the 1880's senior members of Congress were intentionally going around the 1871 Indian policy and trying to fulfill the promises that had been made to friendly Indian tribes under the original assimilation policy. *See Nebraska v. Parker*, 136 S.Ct. 1072 (2016). This attempt to return to the assimilation policy was incorporated into the Dawes or General Allotment Act of 1887. At the same time, many other members of Congress were more than hesitating to relinquish the essentially unlimited authority they possessed over Indians from the 1871 policy. This was the creation of the schizophrenic federal Indian policy that still exists today.

It was not only Congress that was beginning to relish this virtually unlimited authority over the Indians and explore new possibilities of applying it. According to the historical documents from the Rio Grande, multiple federal attorneys in the Departments of State, Interior and War were also seeing the possibilities. Whether it was the attorney bureaucrats or their Secretary bosses that wanted to expand this power, federal officials at the upper levels were beginning to understand that the application of this power over the Indians could be used and developed for other purposes.

The Memorandum titled "The Embargo on the Upper Rio Grande" by Ottamar Hamele is a confession explaining what the United States did on the Rio Grande to cheat the Rio Grande Dam and Irrigation Company out of the right of way it had been granted under the statute of March 3, 1891, 26 Stat. 1095, to

build the Elephant Butte Dam on February 1, 1895. The memorandum explains step by step how the Mexican complaints were denied but then apparently applied on moral grounds.[8] The result was a letter from the Secretary of the Interior dated December 5, 1896 to the General Land Office declaring an embargo and suspending all further applications for rights of way in Colorado and New Mexico. While the Secretaries of State, Interior and War all are named in this Memorandum as well as the Attorney General, no mention is made of any contact or decision of the President or any member of Congress to authorize the suspension of the Congressional statute of March 3, 1891, 26 Stat. 1095. The claimed justification for the embargo is to negotiate a future water treaty with Mexico. When the treaty negotiations faltered, the Secretary of State questioned whether the Rio Grande was a navigable river and requests another Attorney General's opinion on the subject. Even with the change of presidential administration the opinion is issued assuming the Rio Grande is a navigable river at Elephant Butte despite all of the upstream diversions of water that had already greatly depleted its flow. As described in the section entitled "Litigation with the Rio Grande Dam and Irrigation Company" twice the trial court and the Territorial Supreme Court dismissed the federal complaint finding that the Rio Grande was not navigable. Twice, the United States Supreme Court reversed requiring that more evidence be taken in the case to give the United States additional opportunities

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8 The Hamele Memorandum has no page numbers. It is divided into sections by captions explaining the various actions that were taken. The section relating to the above statement is "Agreement of May 6, 1896."

to stop the construction. Finally, the United States changed its position and argued that the right of way to build the dam had only been granted for 5 years and that time had expired. This argument was finally accepted and ended the possibility of the construction of the storage dam by the Company.

As the Hamele memorandum explains just a few years later the United States announced it would build a larger water storage dam at Engle, New Mexico attached to the Elephant Butte bluff. Only this federal reclamation project now came attached with all the changes in federal law deliberately manufactured by the United States. Most notably, that the United States claimed actual ownership of all of the unappropriated water of the Rio Grande for its project as detailed in the memorandum and its attachments. Lastly, although nicely stated, the end of the Hamele memorandum explains that the Rio Grande Compact Commission was convened and agreed to by the three States as the only means by which the United States would finally release the embargo order on the Rio Grande. The States had no choice but to accept the terms of the United States as to how their rights had been altered by the fraud and could potentially lose their water rights if they opposed the de facto fraud of the United States.

B. The Abuse of the Navigation Servitude

While the admitted to facts regarding the embargo on the Rio Grande are revealing they do not explain how the federal attorneys turned the navigation argument that failed in the Rio Grande dam cases into the completely unaccountable power it has become today to create the present case. It requires a reading of the second memorandum on Federal Irrigation

Water Rights to see just how abusive the navigation doctrine became by being combined with the war power to issue the embargo on the Rio Grande. While counsel could contest the various points made in this memorandum, for purposes of this case at the petition stage counsel will not do so but will allow the written memorandum to speak for itself. It is more important that this Court realize what the claimed federal authority really is. Counsel reminds this Court that this is a Memorandum dated January 22, 1930 and that the United States undoubtedly claims more than this today. The reasoning in the 1930 memorandum is more detailed than the reasoning applied by the Ninth Circuit. The difference is that the 1930 memorandum tries to justify or interpret how separate constitutional powers were combined from the fraud on the Rio Grande to claim ownership of all water while the Ninth Circuit erroneously assumes that the Commerce power always included these other constitutional powers.

Attorney Ethelbert Ward states that the federal reserved water rights doctrine was established when this Court opined that "Although this power of changing the common law rule as to the stream within its domain undoubtedly belongs to each State, yet two limitations must be recognized: First, that in the absence of specific authority from Congress, a State by its legislation cannot destroy the right of the United States, as the owner of lands bordering on streams, to the continued flow of its water so far at least as may be necessary for the beneficial uses of the government property..." *U.S. v. Rio Grande Dam and Irrigation Co.*, 174 U.S. 690, 703 (1899). See Memorandum titled "Federal Irrigation Water Rights" by Ethelbert Ward, dated January 22, 1930, bottom of p. 3. As made clear by the exhibits to the Embargo of the Upper Rio

Grande memorandum, the recognition by this Court of the rights of the United States as the owner of lands bordering on streams was immediately put into effect against the Territory of New Mexico. A claim to all of the waters of the Rio Grande within the Territory was made and filed to the State Engineer.

This memorandum on Federal Irrigation Water Rights goes much further than just asserting these rights within federal irrigation projects. The first sentence "The United States is the owner of the unappropriated waters in the non-navigable streams in the public land States of the arid West." sets the stage. As just stated above, the United States claimed all of the unappropriated waters of the Rio Grande even though they had argued in this Court that the Rio Grande was a navigable river. But to claim all of the unappropriated waters according to this analysis the United States also had to be claiming that the Rio Grande was non-navigable. The Ward memorandum explains how the United States can use either argument navigable or non-navigable to gain the same results on federal reserved rights. The reason is stated just before the quote from the Rio Grande dam case on p.3. "Even in the States where the appropriation system prevails, the United States continues to hold its land and waters as a riparian proprietor at common law."

In other words, the lawyers for the United States have determined that their interpretation of the law is not subject to challenge in any court of law or by Congress because they have the absolute right to treat the public land states as being continuously under the territorial war powers. If the territorial war powers can be asserted against any State simply by saying it is for the Indians what is the difference in saying that the

same power exists in a slightly different analysis?

This Court was absolutely complicit in allowing the general reserved rights doctrine established in *Dred Scott v. Sandford*, to remove the future state interests of New Mexico. Just like Congress and the line of Presidents from Ohio that had learned how Edwin Stanton had reserved great powers to the United States through the 1871 Indian Policy, this Court played along with the new federal game of asserting the retained war powers as domestic law. As stated in the Summary of the Argument section of the brief, Indians were literally kidnapped off of two reservations and forced to live at the two dam sites to prevent construction by the Rio Grande Company. Using the Indians was the means to this unlimited power. Of course, it did not take the United States or this Court long to expand federal power into other newly discovered reserved federal ownership rights through Indian treaties or claims to unmentioned water rights vesting when Indian reservations were established. The Ward memorandum sets out in exacting detail how every law and decision by this Court through 1930 can be interpreted by the federal attorneys to further this federal interest. "The power of the Government to reserve the waters and exempt them from appropriation under the State laws is not denied, and could not be. United States v. Rio Grande Ditch & Irrigation Co., 174 U.S. 690, 702; United States v. Winans, 198 U.S. 371. That the Government did reserve them we have decided, and for a use which would be necessarily continued through years. Winters v. United States, 207 U.S. 564, 577 (1908)." Ward Memorandum at p.8. The Ward memorandum then continues into how Section 8 of the Reclamation Act also does not change any of the federal reserved water

rights.

This Court knowingly and deliberately broke the rule of law as requested by the federal attorneys in the Rio Grande Dam cases. No longer did Congress exclusively exercise plenary territorial war power authority to determine the processes and rights of persons in the territories until those territories become States. *See American Insurance Co. v. Canter*, 26 U.S. 511 (1828). From 1897 forward, any Secretary wielded even greater territorial war powers than Congress because they were completely unaccountable to the people or companies they harmed by altering legal processes. It was highly unlikely that anyone would ever find out how their justifiable expectations to a government process were altered because the information from the federal attorneys was and is privileged unless the documents have been placed into the public record in the National Archives. This was an unforeseen accident that these two memoranda after almost 100 years have now been found in released public files and can be used to question the very basis of the federal reserved rights doctrine.

C. The Veeder Memoranda and the Nixon Indian Policy to Promote Tribal Rights

This *amici* brief will address only the first two of the Veeder memoranda recently found. Both were written by Veeder after he was fired from the Department of Justice (DOJ) sometime between 1965 and 1967. After he was fired from his long standing position with DOJ he was appointed first by President Lyndon Johnson as a special consultant to the Department of the Interior's Solicitor's Office. This special appointment was renewed by the Nixon administration. In fact, under the Nixon administration,

Veeder had an office in the White House and reported to Leonard Garment. Veeder was the main designer of the Nixon Indian policy according to the documents located by CERF. After the Nixon Indian policy was announced and presented to Congress Veeder turned on the Department of the Interior writing vehement memoranda that they were not doing enough to protect Indian rights.

The memorandum "Respecting Federal Trust Responsibilities For Managing Indian Forests with Points and Authorities in Support" dated September 19, 1968 explains how William H. Veeder interpreted the Indian trust relationship created by this Court to alter separation of powers principles. Attached to this Memorandum is his synopsis of the Indian Trust Responsibility. The second memorandum is a comprehensive explanation with points and authorities from William H. Veeder that is the legal basis of the Nixon Indian policy. It is titled "Implementation of Memorandum Respecting American Indian Reservation Economic Development Retarded or Thwarted Through Abridgement or Loss of Indian Titles to Land and Rights to the Use of Water by Policies, Agencies and Personnel of the Federal Government." This 126 page memorandum dated May 14, 1969 explains how any physical thing that can be claimed for the Indians can be subjected to federal authority.

There are several major differences in the way Veeder interpreted the Indian trust relationship. Many of these perspectives were attempted by the Obama administration and brought on the current concern over how tribal sovereignty is displacing federalism. But the Obama administration did not ever explain the basis of the reasoning. Starting with the "Indian Trust

Responsibility" document the very first paragraph sets the new position. The initial assumption is that the Constitution creates an *in praesenti* covenant with the Indians that is perpetual. The second paragraph is titled "The trust has been and must be fulfilled by the three great branches of the government." The objective of the trust in the ultimate is the betterment of the individual Indian for whom the covenant was entered into on both sides. It then explains that the trust is not a private trust but a government trust. Then the Executive authority for the fulfillment of the trust is said to be in the Secretary of the Interior who then is said to have broad discretionary power to meet the goals defined by this trust relationship. It ends with one paragraph applying these principles to the management of the Indian forests.

The attached memorandum is even more disturbing. Veeder bases his view of the constitutional covenant with the Indians squarely on *Worcester v. Georgia*, 31 U.S. 515, 546 (1832). He then cites *United States v. Kagama*, 118 U.S. 381 (1886). He states that the covenant with the Indians is the supreme law of the land under these rulings. He then begins to turn to how this is enforced through the Indian Commerce Clause incorporating elements from the Articles of Confederation into his interpretation. It then proceeds to explain how the Secretary of the Interior can exercise all of these constitutional powers based solely on his discretion to act on behalf of the Indians. He then claims that there is an enforceable standard of diligence that the tribes can enforce against the Secretary and government. The memo ends with specific recommendations for managing Indian forests and how that standard is to the level of a private trustee.

The title of the second memorandum sets the

stage: "Implementation of Memorandum Respecting American Indian Reservation Economic Development Retarded or Thwarted Through Abridgement or Loss of Indian Titles to Land and Rights to the Use of Water by Policies, Agencies and Personnel of the Federal Government." This memorandum also concerns the enforcement of the Indian Trust Responsibility document. The main point of this memorandum is that a separate federal corporation based on how the Tennessee Valley Authority was set up should be given the authority to exercise the constitutional covenant with the Indians to fully protect their property and rights. Specifically, Veeder recommends: "Congress should enact legislation which would place in an agency independent from the Department of the Interior and the Department of Justice the full responsibility for the protection, preservation, administration, development, adjudication, determination, and control including but not limited to all legal services required in connection with them, of the lands and rights to the use of water of the American Indian Reservations in western United States." P.1 of memorandum. The prime objective of his study is to find a way to avoid the conflicting interests of Congress, the Executive and personnel that prevent the full enforcement of the covenant with the Indians.

Counsel will summarize the main legal points for the sake of brevity. The memo transitions from respecting how the Indians view their own lands which should be respected and enforced against all to the argument that economic development of the reservations is to create a means of sustenance for the tribes for these rights. This argument for sustenance defines the term "trust property" as including the actual rivers, lakes and waterfronts as the source of sustenance for tribes using the resources of the

waterways. Memo at p. 12. From here Veeder continues into how the federal reserved rights doctrine can be further expanded to include this right to sustenance by making the federally reserved water rights actual trust property belonging to the tribes. Memo at p. 21. Pages are spent on how this Court's decision in *Arizona v. California*, 373 U.S. 546 (1963) established the basis for the tribes having a perpetual ownership interest in all waters for their sustenance. Going back to the broad trust established in *Worcester*, Veeder then argues that these federal reserved water rights and treaty rights are private and not public rights that must be administered as a priority. Memo at p.33. The memo continues by explaining how his definition of these private federally reserved water rights can be used to overcome riparian, prior appropriative and ground water rights conferred under state law. This section ends with a direct attack at federal-state relations.

On p. 49 Veeder starts over this time rewriting early American history to comport to his view of the constitutional covenant between the national government and Indians. This rewritten history is familiar because this is how the memorandum written for President Ford by Leonard Garment titled "What Level Tribal Sovereignty?" begins. CERF has been in possession of the sanitized version of the Veeder position since 2009 and has often cited it to this Court in previous *amicus* briefs. The next 65 or so pages of the Veeder memo explain how tribal sovereignty can be used to make the covenant a reality in our law again citing *Worcester v. Georgia* as the main authority. Unlike the Garment memo which promoted tribal sovereignty through the federal government, Veeder argues that the federal government can never be

trusted to fully pursue the Indian rights. Most importantly, Veeder is not making a tribal sovereignty argument. He is making a property rights argument and explains how the federal government interests conflict with those property rights. He spends 50 pages explaining why an independent federal corporation like the Tennessee Valley Authority run by the Indian tribes must be created to vindicate all tribal rights.

Veeder never really mentions the Indian Reorganization Act in the 126 pages of this memorandum on the massive expansion of the federal trust responsibility. William H. Veeder was a true believer in promoting and protecting Indian tribal rights. This is proven by the subsequent memoranda where he turns on the federal government for not protecting those rights and accuses the government of using the Indians for their own purposes. By suppressing the information on William H. Veeder and what he wrote for the United States government, the Executive branch has created a true Madisonian faction of a small cadre of federal attorneys promoting his expanded trust concepts while not allowing the full constitutional ramifications of his ideas to be disclosed. No wonder the Obama administration pursued these objectives on the waterways.[9]

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9 *See e.g.*, United States Department of the Interior Office of the Solicitor, *Memorandum – Reaffirmation of the United States' Unique Trust Relationship with Indian Tribes and Related Indian Law Principles*, M-37045 (Jan. 18, 2017) at p. 14 (discussing how the tribal trust obligation applies to the case at bar); United States Department of the Interior Office of the Solicitor, *Memorandum – Boundary of the Skokomish Reservation Along the Skokomish River*, M-37034 (Jan. 15, 2016). *See also* U.S. Department of State, *Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples*,

III. THIS COURT MUST FIND A WAY TO END THE MADISONIAN FACTION OF FEDERAL ATTORNEYS PROMOTING TRIBAL SOVEREIGNTY AGAINST ALL OTHER INTERESTS

For more than 20 years the Citizens Equal Rights Foundation (CERF) has been presenting *amici curiae* briefs to this Court requesting that this Court reexamine its prior cases granting plenary authority to the Congress and Executive branch over Indians under current federal Indian policy. Two terms ago, in several opinions this Court called into question the continuing plenary authority. One of those cases was *Sturgeon v. Frost*,136 S. Ct 1061 (2016). The Chief Justice himself warned the Ninth Circuit Court of Appeals in the unanimous opinion that further expanding the federal

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Office of the Spokesman (Dec. 16, 2010), available at: http://www.state.gov/r/pa/prs/ps/2010/12/153027.htm ("The decision to support the Declaration represents an important and meaningful change in the U.S. position, and resulted from a comprehensive, interagency policy review, including extensive consultation with tribes" (emphasis added)); The White House Office of the Press Secretary, *Remarks by the President at the White House Tribal Nations Conference* (Dec. 16, 2010), available at: https://www.whitehouse.gov/the-press-office/2010/12/16/remarks-president-white-house-tribal-nationsconference; Krissah Thompson, *U.S. Will Sign U.N. Declaration on Rights of Native People, Obama Tells Tribes*, Washington Post (Dec. 16, 2010), available at: http://www.washingtonpost.com/wpdyn/content/article/2010/12/16/AR2010121603136.html.

reserved water rights doctrine would have great implications but did not articulate what those implications would be. The Ninth Circuit upon rehearing chose to ignore the warning and has greatly expanded the federal reserved water rights doctrine to now include full plenary authority under the Commerce Clause.

Similarly the Ninth Circuit has now declared the Point Elliot Treaty to include sustenance rights just as William H. Veeder set out for the Nixon administration's Nixon Indian Policy. The Nixon Indian policy as the continuation of the federal reserved rights conspiracy now completely dominates our law. Only this Court can fix how this trust and reserved power have been combined to do this. There cannot be a separate equity authority that protects only Indians. To continue to so hold continues the Madisonian faction that is destroying our Constitution just as President Nixon hoped would happen.

Ultimately the question is one of separation of powers that depends on how this Court defines the concept of judicial review, the very issue just addressed in *Patchak v. Zinke*. Since the Civil War this Court has allowed federal attorneys to define the Constitution and spoon feed to the Justices the legal result they want in a decision. This Court has allowed lawyers representing the United States to define what is good or bad for the national government instead of this Court deciding what is best for preserving self-government and the rights of the people. This Court needs to be like an architectural board deliberately and carefully protecting the structure of the Constitution that literally keeps our civil rights and liberties intact. The utter failure of this Court has allowed a steady increase of federal authority across anything a federal attorney

can claim as a federal interest. Former Justice Sandra Day O'Connor described this as the loss of individual liberty. There is no personal liberty when the Supreme Court always accepts that the federal government has an interest in any and all commercial activities. Very few things that any person owns or does today are not products or services in commerce.

This Court with the Civil War Amendments has had the ability to restore the rule of law and forever end the federal reserved rights doctrine by making all people equal before the law. This Court should at least revisit whether it had equity jurisdiction in *Worcester v. Georgia*.

CONCLUSION

This Court should reverse the decision of the Ninth Circuit Court of Appeals.

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No. 17-269

In The Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, et al.

Respondents.

On Writ Of Certiorari To The United States Court Of Appeals For The Ninth Circuit

BRIEF OF *AMICI CURIAE* THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON, THE CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION, AND THE NEZ PERCE TRIBE IN SUPPORT OF RESPONDENT UNITED STATES AND RESPONDENT TRIBES AND AFFIRMANCE

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QUESTIONS PRESENTED

1. Whether Washington violated a treaty "right of taking fish, at all usual and accustomed grounds and stations . . . in common with all citizens," by constructing hundreds of barrier culverts that block salmon from reaching many usual and accustomed fishing grounds and harm the salmon population by preventing salmon from migrating to reproduce.

2. Whether Washington can assert an equitable defense against the United States based on the notion that the United States made the state use these culvert designs.

3. Whether the district court's injunction is consistent with the court's equitable discretion.

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INTERESTS OF *AMICI CURIAE* COLUMBIA RIVER TREATY TRIBES[1]

The Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Umatilla Indian Reservation, and the Nez Perce Tribe are each successor-in-interest to treaties with the United States that "secured" to the Tribe "the right of taking fish" at "all" their usual and accustomed fishing places, substantially identical to the treaty provisions at issue in this case. Treaty of June 25, 1855, with the Tribes of Middle Oregon (Warm Springs Treaty) (12 Stat. 963); Treaty of June 9, 1855 with the Umatilla Tribe (12 Stat. 945); and Treaty of June 11, 1855 with the Nez Perces (12 Stat. 957).[2] These three *amici* tribes, together with the respondent Confederated Tribes and Bands of the Yakama Nation, are collectively referred to as the "Columbia River Treaty

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[1] Pursuant to Supreme Court Rule 37.3(a), all parties have consented to the filing of this brief. Pursuant to Rule 37.6, the *amici* submitting this brief and their counsel represent that no party to this case nor their counsel authorized this brief in whole or in part, and that no person other than *amici* paid for or made a monetary contribution toward the preparation and submission of this brief.

[2] The treaties of *amici* Umatilla Tribe and Nez Perce Tribe, along with respondent Yakama Nation's treaty, were negotiated and signed at the Walla Walla (Washington Territory) Treaty Council by Isaac Stevens, Governor and Superintendent of Indian Affairs for Washington Territory, and Joel Palmer, Superintendent of Indian Affairs for Oregon Territory. The Warm Springs Treaty was negotiated and signed by Joel Palmer at the Wasco Treaty Council near The Dalles, Oregon Territory. Collectively, the 1855 treaties of the Columbia River Treaty Tribes are referred to as the "Stevens" treaties.

Tribes." The United States initiated suit on behalf of these four Columbia River Treaty Tribes in 1968 to implement and enforce these treaty fishing rights in *United States v. Oregon* (consolidated with *Sohappy v. Smith*), 302 F. Supp. 899, 904 (D. Or. 1969). The three *amici* Columbia River Tribes appeared as *amici* and submitted a joint brief supporting the Respondent Tribes and the United States in the district court proceeding in this case. *United States v. Washington*, Civ. No. 2:01-SP-00001-RSM (W.D. Wash. Sept. 27, 2006), ECF No. 314.

SUMMARY OF ARGUMENT

The *amici* Columbia River Treaty Tribes, neighbors to the south of the Respondent Tribes, share with those Tribes a similar treaty history, and nearly identical fishing provisions in their treaties securing the right to take fish at all their usual and accustomed fishing places. This Court's earliest interpretations of the Stevens treaties fishing language, beginning with *United States v. Winans* in 1905, arose on the Columbia River involving Columbia River treaty Indians.

Proceedings on the Columbia River, beginning with *Winans*, have laid the foundation for the district court's ruling in this case by recognizing the treaty fishing right's protection of the fishery itself, not merely access or an opportunity to fish. The foundational right to the fishery has been upheld on the Columbia River by the lower courts, and it has not resulted, as Washington and its *amici* speculate will happen here, in widespread disruption. Under the auspices of *United States v. Oregon* and the Northwest Power Act, Oregon, Washington, and Idaho have acknowledged the Columbia River Tribes' treaty rights and sovereign co-management responsibilities. Together, the State and Tribal governments have worked collaboratively not simply to divide shares of whatever fish harvest may happen to be available each year, but to protect productive fish habitat, restore habitat which has been degraded, and rebuild salmon runs.

The recognition of and respect for a meaningful Treaty right has underpinned productive action that has benefited the resource, the Tribes, non-Indian fishermen, and the Columbia River region as a whole.

ARGUMENT

I. The Interdependence Of Fish And The Indians Of The Pacific Northwest Cannot Be Overstated, And Is Central To Understanding The Stevens' Treaty Fishing Rights.

Geographically, the *United States v. Washington* case area is set in the marine waters and tributaries of Puget Sound, Strait of Juan de Fuca, and the Washington coast, and the Columbia River Treaty Tribes' issues are set in a single, albeit very large, river system, the Columbia River Basin. Although geographically distinct, the Columbia River Tribes and the Respondent Tribes share many similarities: from the importance of salmon; to the assurances sought by the tribes and provided by the United States in the treaty negotiations; to the treaty language that "secured" to the tribes "the right of taking fish"; to the case law developments in the two Pacific Northwest treaty Indian fishing rights cases, *United States v. Washington* and *United States v. Oregon*.

This Court's early interpretations of these treaty fishing rights provisions emerged from the Columbia River. *United States v. Winans*, 198 U.S. 371 (1905); *Seufert Bros. Co. v. United States*, 249 U.S. 194 (1919); and *Tulee v. Washington*, 315 U.S. 681 (1942). In these cases, and in the *United States v. Oregon*, *United States v. Washington*, and *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658 (1979) cases to follow, the courts have necessarily recognized the interdependence of the fish and the Indians of the Pacific Northwest, as well as the

importance of the fishery guarantees in the Treaties as evidenced by the record of the treaty negotiations.

The interdependence of the fish and the Indians of the Columbia Basin cannot be overstated: fish are essential to the Columbia River Treaty Tribes' sustenance, resiliency, health, culture, language, ceremonies, and very way of life. The courts have recognized this:

> From the earliest known times, up to and beyond the time of the treaties, the Indians comprising each of the intervenor tribes were primarily a fishing, hunting, and gathering people dependent almost entirely upon the natural animal and vegetative resources of the region for their subsistence and culture. They were heavily dependent upon such fish for their subsistence and trade with other tribes and later with the settlers.

United States v. Oregon, 302 F. Supp. at 906. This continues today. As this Court similarly noted in *Fishing Vessel*, the Indians of the Pacific Northwest have always "shared a vital and unifying dependence on anadromous fish." 443 U.S. at 676.

II. The Assurances Sought And Provided At The Treaty Negotiations Concerning The Treaty Fishing Provision Were Critical To Concluding The Treaties As Evidenced By The Record Of The Treaty Negotiations, And Are Central To Understanding The Stevens Treaty Fishing Rights.

Just as the importance of the fish to the Columbia River Treaty Tribes and the Respondent Tribes cannot be overstated, the importance of the fishing provision to concluding the treaties cannot be overstated.

The treaties of *amici* Umatilla and Nez Perce Tribes were negotiated in early June 1855 at the Walla Walla (Washington Territory) Treaty Council along with the treaty of respondent Yakama Nation. Washington Territorial Governor Stevens and Oregon Territorial Indian Affairs Superintendent Joel Palmer were the United States representatives. The treaty with *amicus* Warm Springs Tribe was negotiated two weeks later in late June 1855 at the Wasco Treaty Council near present day The Dalles, Oregon. Superintendent Palmer was the United States representative.

At the Walla Walla Treaty Council, Governor Stevens assured a prominent and skeptical Nez Perce leader, Looking Glass, regarding the treaty's off-reservation rights:

> I will ask of Looking Glass whether he has been told of our council. Looking Glass knows that in this reservation settlers cannot go, that he can graze his cattle outside of the

> reservation on lands not claimed by settlers, that he can catch fish at any of the fishing stations, that he can kill game and go to buffalo when he pleases, that he can get roots and berries on any of the lands not occupied by settlers.

Record of Proceedings, Walla Walla Valley Treaty Council, June 9, 1855.

The courts have consistently understood the foundational significance of the assurances made by the United States' representatives at the treaty negotiations. In *United States v. Oregon*, the court stated, in its initial decree:

> During the negotiations which led to the signing of the treaties the tribal leaders expressed great concern over their right to continue to resort to their fishing places and hunting grounds. They were reluctant to sign the treaties until given assurances [citing Governor Stevens' assurances to Looking Glass at the Walla Walla Valley Treaty Council] that they could continue to go to such places and take fish and game there. The official records of the treaty negotiations prepared by the United States representatives reflect this concern and also the assurances given to the Indians on the point as inducement for their acceptance of the treaties.

United States v. Oregon, 302 F. Supp. at 906 and n.1. *See Fishing Vessel*, 443 U.S. at 667 n.1 (Stevens assuring assembled Indians at Point-No Point treaty grounds that "This paper secures your fish").

Similarly, the district court in this case emphasized this Court's statement in *Fishing Vessel*:

> Governor Stevens and his associates were well aware of the 'sense' in which the Indians were likely to view assurances regarding their fishing rights. During the negotiations, the vital importance of the fish to the Indians was repeatedly emphasized by both sides, and *the Governor's promises that the treaties would protect that source of food and commerce were crucial in obtaining the Indians' assent.*

443 U.S. at 676; District Court's Order on Cross-Motions for Summary Judgment, Pet. App. 264a (adding emphasis).

III. The Stevens Treaties "Secure" To The Tribes "The Right Of Taking Fish" At "All" Usual And Accustomed Grounds And Stations.

The text of the Stevens Treaties "secured" to the tribes "the right of taking fish" at "all" usual and accustomed grounds and stations. First, the word "secure" as used in the Treaties, and used by Stevens in the treaty negotiations, is defined by contemporaneous Webster's dictionaries as:

> To guard effectively from danger; to make safe. . . . To make certain; to put beyond hazard. . . . To insure, as property. (1828).[3]
>
> To make safe; to relieve from apprehensions of, or exposure to, danger; to guard; to protect. . . . To put beyond hazard of not receiving, or of losing; to make certain; to assure; to insure. (1840, 1847, and 1856).[4]

Second, the right secured is the right to "tak[e] fish," that is to "get [them] into [their] power." 2 Websters Dictionary 88h (giving the example "to take fishes with nets, or with hook and line"). Third, the secured right to take fish extends to "all" of the tribes "usual and accustomed grounds and stations." Thus, the text of the treaties preserves the tribes' ability to actually harvest fish, not merely to dip their nets into an empty river.

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[3] 2 Noah Webster, An American Dictionary of the English Language 66e (1828).

[4] Noah Webster, L.L.D., An American Dictionary of the English Language (1840). (The 1840, 1847, and 1856 editions of Webster's Dictionary, approved by Acts of Congress, all define "secure" the same way.)

IV. This Court's First Case Interpreting A Stevens Treaty Fishing Right, *United States v. Winans*, Laid The Foundation For The District Court's Ruling In This Case By Recognizing The Treaty Fishing Right's Protection Of The Fishery Itself, Not Merely Access Or An Opportunity To Fish.

Over one hundred years ago, this Court held that the Stevens treaty fishing right provides significant, and enforceable, protection for the secured right to take fish. In *United States v. Winans*, the United States, on behalf of Yakama Indians, sued the owners of state-licensed fish wheels in the Columbia River for violating a Stevens Treaty, because the fish wheels "catch salmon by the ton" and were "rapidly diminishing the supply" of salmon as well as excluding the Yakama tribal members from their fishing places. 198 U.S. at 372. The United States Solicitor General cautioned that in interpreting the Stevens Treaty fishing clause, the focus must be on the assurances sought by and made to the tribes in negotiating the treaty and the fishing rights secured therein, rather than redefining the treaty rights to harmonize them with subsequent actions of non-Indians.[5] The Court held that the

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[5] In *U.S. v. Winans*, 198 U.S. at 372, the Solicitor General argued:

> The Government has always striven against disparity between our promises when obtaining treaties and the actual meaning of the instrument as it is sought to be construed when the greed of white settlers is aroused. The treaty involved was not merely one of peace and amity, or of "friendship, limits and accommodation," but a treaty of cession of lands by accurate description and

Treaty "imposed a servitude" and prohibited non-Indians from using devices such as fish wheels to obtain "exclusive possession of fishing places." 198 U.S. at 381-82. The Court remanded for a remedy in accordance with the Solicitor General's suggestion that the fish wheels be removed or their operation heavily curtailed, allowing fish to escape upstream for tribal fishing. *Id.* at 384.

Washington attempts to read *Winans* narrowly as standing only for the proposition that the tribes have a right of "access to traditional fishing places." Wash. Br. at 30. This cramped reading of *Winans* cannot be squared with the case itself, as this Court recognized that the fish wheels infringed on the Stevens treaty rights both by blocking tribal members from fishing and by preventing fish from passing upstream to the tribal usual and accustomed fishing grounds. 198 U.S. at 384.

In *Winans*, this Court applied two foundational principles of Indian treaty law first established in the 1832 landmark case of *Worcester v. Georgia*, 31 U.S. 515 (1832): the "reserved rights" doctrine, and the special rules for interpreting Indian treaty language. Thus, this Court in *Winans* explained that the 1855 Yakama Treaty's secured right to take fish "was a part of larger rights possessed by the Indians" which "were not much less necessary to the existence of the Indians than the atmosphere they breathed." 198 U.S. at 381. Properly

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on considerations duly expressed, one of which was the fishery rights now contended for.

understood "the treaty was not a grant of rights to the Indians, but a grant of right from them – a reservation of those not granted." *Id.* The treaty contains no express right of access across privately owned "perfect, absolute title" land to off-reservation usual and accustomed fishing places, because "[r]eservations were not of particular parcels of land, and could not be expressed in deeds." *Id.* The treaty language, "reserved rights, however, to every individual Indian, as though named therein" and "imposed a servitude upon every piece of land as though described therein." *Id.*[6] The treaty language, this Court explained, must be construed as the treaty Indians, "that unlettered people," had understood it. *Id.* at 380.

This Court in *Winans* was faithful to the treaty interpretation principles first set out by Chief Justice Marshall in *Worcester*. In *Worcester*, this Court was required to interpret certain provisions of the 1785 Treaty of Hopewell between the United States and the Cherokee Nation. In doing so, this Court developed and applied special Indian treaty canons of construction so that "unlettered" Indian treaty signers would have treaty terms interpreted by the Court as they would have understood them: "There is the more reason for supposing that the Cherokee chiefs were not very critical judges of the language, from the fact that every one

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[6] The Court rejected the argument that there were no rights because the deed contained no mention of a treaty access right: "It makes no difference, therefore, that the patents issued by the Department are absolute in form. They are subject to the treaty as to the other laws of the land." *Id.* at 382.

makes his mark; no chief was capable of signing his name. It is probable the treaty was interpreted to them." 31 U.S. at 551. Thus, the 1785 Hopewell Treaty's Article IV use of term "allotted" did not mean the Cherokees were "receiving" their reservation lands from the United States, but, instead, that they were reserving them from the aboriginal title lands they had "ceded" and "granted" to the United States. Moreover, the Article IV term "hunting grounds" did not restrict the Cherokees' "full use of the lands they reserved," but only described their primary lifestyle at treaty time and accommodated changes in use as the tribe developed. *Id.* at 553. Finally, the Article IX Treaty language authorizing Congress to "manage all their affairs" could not be construed as "a surrender of [Cherokee] self government" but, instead, as the Cherokees would have understood this language, to mean "the regulation of all affairs connected with their trade." *Id.* at 518. Any other interpretation " . . . would convert a treaty of peace covertly into an act, annihilating the political existence of one of the parties." 31 U.S. at 554.

Following *Winans*, the next two occasions this Court had to consider the Stevens treaties, the cases again arose on the Columbia River and involved Yakama tribal fishermen. In *Seufert Bros. Co.*, 249 U.S. 194, this Court applied the by then well-settled rule that "we will construe a treaty with the Indians as 'that unlettered people' understood it" to conclude that a treaty tribe's "usual and accustomed fishing places" were not limited by the boundaries of the tribe's treaty ceded territory. *Id.* at 198. In *Tulee*, 315 U.S. at 684, this

Court, in interpreting the Yakama treaty, emphasized the significance of the negotiations that led to the Stevens treaties: "From the report set out in the record before us of the proceedings in the long council at which the treaty agreement was reached, we are impressed by the strong desire the Indians had to retain the right to hunt and fish in accordance with the immemorial customs of their tribes." This Court again stated that: "It is our responsibility to see that the terms of the treaty are carried out, so far as possible, in accordance with the meaning they were understood to have by the tribal representatives at the council and in a spirit which generously recognizes the full obligation of this nation to protect the interests of a dependent people." *Id.* at 684-85. Thus, this Court held that the 1855 Yakama Treaty precluded application of state license fees to treaty fishermen.

V. The *United States v. Oregon* Treaty Fishing Rights Litigation.

Throughout the middle of the twentieth century, disputes between Columbia River Treaty Tribes and state regulators continued to arise, eventually leading in 1968 to a federal court action brought by more than a dozen individual fishermen, denominated *Sohappy v. Smith*, shortly followed by an action filed by the United States as trustee for the Columbia River Treaty Tribes. The two cases were consolidated as *United States v. Oregon*, Civ. Nos. 68-409, 68-513 (D. Or.) and proceeded to trial and judgment before Judge Belloni. In a 1969 order and opinion, the district court laid out the limited

circumstances under which the state could regulate treaty Indian fishing, which came to be called the "conservation necessity principles," and established that the tribes have "an absolute right to [the] fishery, [and] are entitled to a 'fair share' of the fish produced by the Columbia River system." *United States v. Oregon*, 302 F. Supp. at 911.

In 1974, Washington intervened in *United States v. Oregon* and, in so doing, became bound by the law of the case. Also in 1974, the district court amended its 1969 judgment to define the treaty tribes' "fair share" allocation as "50 percent" of the spring Chinook salmon run to the Columbia. *Sohappy v. Smith*, 529 F.2d 570, 571-73 (9th Cir. 1976) (per curiam).

In 1977, at the urging of the Oregon district court, the parties entered into a "five-year plan" for management and allocation of Columbia River anadromous fish resources subject to the Columbia River Treaty Tribes' fishing rights. *United States v. Oregon*, 657 F.2d 1009, 1011 (9th Cir. 1981). Concerns about the plan's failure to adequately account for non-Indian ocean fisheries led to tribal discontent and renewed pressure from both the district court and the Ninth Circuit to negotiate a replacement plan. *United States v. Oregon*, 718 F.2d 299, 302 n.2 (9th Cir 1983); *United States v. Oregon*, 769 F.2d 1410, 1412-14 (9th Cir. 1985). In 1984, Idaho was allowed to intervene on appeal to the Ninth Circuit. *United States v. Oregon*, 745 F.2d 550 (9th Cir. 1984). Following expiration of the five-year plan, and while the parties continued to work on a comprehensive management plan, the parties negotiated a series

of one-year management plans in 1985, 1986 and 1987. The 1987 plan was acceptable to most but not to all the parties.[7] The district court approved the 1987 plan over Idaho's objections. *United States v. Oregon*, 666 F. Supp. 1461 (D. Or. 1987).

In 1988, the *United States v. Oregon* parties (again, except for Idaho and the Shoshone-Bannock Tribes) reached agreement on a long-term, ten-year management plan, called the Columbia River Fish Management Plan. The Management Plan was approved by the district court over the objections of those two parties, and several non-parties, and was upheld on appeal. *United States v. Oregon*, 913 F.2d 576 (9th Cir. 1990).

As the *United States v. Oregon* parties were implementing the Management Plan, some salmon and steelhead species returning to the Columbia and Snake River Basins were listed under the Endangered Species Act (ESA), beginning with the listing of Snake River sockeye salmon in 1991. 56 Fed. Reg. 58,619 (Nov. 20, 1991). The Columbia River Treaty Tribes worked to ensure that implementation of the ESA was harmonized with their treaty-reserved fishing rights,

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[7] The Shoshone-Bannock Tribes filed a motion to intervene in *United States v. Oregon*. The court granted their motion to intervene, and as a result, they are a party to the case. The Shoshone-Bannock Tribes have never taken action on their complaint in intervention, and all parties have reserved the right to assert any and all defenses they may have to any claims of the Shoshone-Bannock Tribes. *U.S. v. Oregon* Management Agreement (2018-2027), Civ. No. 3:68-cv-00513-MO (D. Or., Feb. 26, 2018), ECF 2607-1.

consistent with the "conservation necessity principles" set forth in the treaty fishing rights case law. The United States' distinct treaty and trust responsibilities to Indian tribes, consistent with the "conservation necessity principles," was acknowledged by the federal agencies responsible for administering the ESA. *Joint Secretarial Order 3206 on American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act* (issued by the Departments of Interior and Commerce) (June 5, 1997).

From 1998 to 2008, the *United States v. Oregon* parties entered into a series of interim management agreements before entering into the 2008-2017 Columbia River Fish Management Agreement approved by the court. *United States v. Oregon*, Civ. No. 3:68-cv-00513 (D. Or., Aug. 11, 12, 2008), ECF 2546, 2547. Recently, following three years of negotiations, the *United States v. Oregon* parties entered into another Management Agreement for 2018-2027. *Id.*, (D. Or., Feb. 26, 2018), ECF 2607-1.

VI. Proceedings In The Columbia River Basin Refute Washington's Arguments That The District Court's Orders In This Case Are Unprecedented Or Novel, And That Recognition Of And Respect For Treaty Rights And Treaty-Based Salmon Protection Will Produce A Flood Of Litigation And Constrain All Development.

In 1980, in *United States v. Oregon*, the district court, consistent with the reciprocal treaty obligations

to prevent destruction of the fish runs, exercised its equity jurisdiction to protect the spring Chinook run as it migrated in the Yakima River, and the Court of Appeals affirmed, in an opinion by then-Judge Kennedy. *United States v. Oregon*, 657 F.2d 1009, 1033 (9th Cir. 1981) (affirming the closure of the Yakama Nation's fishery at various locations in the Yakima Basin for six days per week). These spring Chinook salmon then became the subject matter of a separate proceeding, described as "the collision of two interests: the Yakima[8] Nation's interest in preservation of their fishing rights, and the eastern Washington farmers' interest in preservation of water needed for crops in the dry spring and summer." *Kittitas Reclamation District v. Sunnyside Valley Irrig. Dist.*, 763 F.2d 1032 (9th Cir. 1985), *cert. denied sub nom. Sunnyside Valley Irrig. Dist. v. United States*, 474 U.S. 1032 (1985). The record before the lower court in *Kittitas* amply described how the Yakama fishery has been closed in May to protect the same spring Chinook salmon that had subsequently spawned below the Cle Elum Dam[9] in September. Five months after the fishery had been enjoined to protect the resource, the district court ordered water to be released from the Cle Elum Dam to protect sixty spring chinook salmon redds (spawning beds) from

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[8] In 1994, the Yakama Nation restored the more historically accurate "Yakama" spelling.

[9] The Cle Elum Dam is located in the upper reaches of the Yakima River Basin and is operated by the Bureau of Reclamation. The Yakima River and its many tributaries, including the Cle Elum River, together comprise one of the major salmon-producing basins tributary to the Columbia River.

destruction, and the Court of Appeals affirmed. *Id.* Specifically, the *Kittitas* court held that the district court " . . . was empowered to issue orders directing the allocation of water within the Yakima River system. Its orders authorizing the watermaster to preserve the 1980 redds were reasonable emergency measures." *Id.* at 1035.[10] Thus, the *Kittitas* court, mindful of this

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[10] The concerns raised by Washington's *amici* Modoc Point Irrigation District (MPID) et al. miss the mark. The Treaty of October 14, 1864 between the United States and the Klamath and Modoc Tribes and the Yahooskin Band of Snake Indians, 16 Stat. 707 (1864 Treaty) of concern to *amici*, secured to the Klamath Tribes the exclusive right to hunt and fish within the reservation boundary and includes implied water rights under the *Winans* and *Winters* doctrines. *Winans*, 198 U.S. 371 (1905); *Winters v. United States*, 207 U.S. 564 (1908). *See Kimball v. Callahan*, 590 F.2d 768 (9th Cir. 1979) (*Kimball II*); *See also United States v. Adair*, 723 F.2d 1394 (9th Cir. 1983) (*Adair II*). In fact, *Adair II* held that the Tribes' *irrigation* rights, from which *amici* MPID's rights derive, are subordinate to the Tribes' water rights to support its hunting and fishing lifestyle, which carries "an earlier priority date for appropriation [time immemorial], because of historical use, than do water rights for irrigation." *Adair II*, at 1416 n.25. *Amici* MPID hold irrigation water rights that are junior to the Klamath Tribes' senior time immemorial instream water rights needed to support its hunting and fishing rights. *Adair II*, at 1414. Quantification of the Klamath Tribes' instream water rights is underway in the Klamath Basin Adjudication, *In re Waters of the Klamath River Basin*, No. WA1300001 (Or. Klamath Cir. Ct. Mar. 7, 2013), an action in which *amici* MPID are parties. In times of shortage all junior water right holders' use, like *amici* MPID's, are subject to curtailment in favor of the senior water right holder's use under the long-standing western water law doctrine of prior appropriation or first-in-time, first-in-right. *Amici* MPID's arguments are nothing more than a desperate attempt to re-litigate *Adair II*. Upon close examination of *amici* MPID's circumstances, their real complaint is with the prior appropriation doctrine itself.

"collision of interests," enjoined the release of water to protect salmon spawning beds and the treaty fishing rights of the Yakama Nation in the fishery itself.

In *Confederated Tribes of the Umatilla Indian Reservation v. Alexander*, 440 F. Supp. 553 (D. Or. 1977), the district court found that construction of a proposed dam on Catherine Creek, a tributary of the Grande Ronde River in northeastern Oregon and a part of the Columbia River Basin, would nullify treaty fishing rights by inundating the Umatilla Tribes' usual and accustomed fishing stations and entirely eliminating the steelhead run at all of the Tribes' fishing stations upstream of the dam. To prevent this treaty violation, the district court permanently enjoined the Army Corps of Engineers from constructing a dam and reservoir, despite the Corps' promises to mitigate the project's other environmental impacts, including a proposed program to trap and haul spring adult Chinook around the dam. *Id.* at 555.

Washington's argument that the Stevens treaty negotiators failed to provide for a fully purposeful reservation of the treaty fishing right or that the lower courts' orders in this case are unprecedented or novel cannot be squared with these proceedings from the Columbia River Basin. These proceedings dealt with fact-specific infringements on the treaty right that were presented to the court, much as this case addresses solely the specific facts concerning Washington's barrier culverts.

Amici arguments offered in support of Washington that propose introducing a rule that relief should only be available under the treaties where actions are "intended" to reduce salmon abundance (*Amicus* Pacific Legal Foundation Brief at 5) or that would preclude relief unless there is evidence suggesting that "discrimination against tribal fishing rights tainted the design and operation of Washington's culvert system" (*Amici* Idaho et al. Brief at 16), also cannot be squared with these cases from the Columbia Basin. Nor is there any other basis for introducing a *mens rea* type of inquiry about whether an activity is "intended" to impact fish (as opposed to objectively impacting fish), or for precluding relief unless the activity specifically discriminates against tribes.[11]

Finally, these proceedings from the Columbia Basin illustrate that recognition of and respect for treaty

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[11] *Amici* Idaho et al. attempt to find support for a "non-discriminatory standard" (Idaho et al. *amici* Brief at 15-16) in a characterization set forth in a district court opinion in *Nez Perce Tribe v. Idaho Power Co.*, 847 F. Supp. 791 (D. Idaho 1994). That case's characterization of the treaty fishing right has been widely criticized by legal scholars and commentators. *See, e.g.*, Allen H. Sanders, *Damaging Indian Treaty Fisheries: A Violation of Tribal Property Rights*, 7 Pub. Land & Resources L. Rev. 153 (1996). And notably, after the Nez Perce Tribe appealed the decision to the Ninth Circuit and the case was fully briefed and awaiting oral argument, the Tribe and Idaho Power Company reached a settlement agreement whereby Idaho Power Company agreed to pay the Tribe $11.5 million in exchange for the Tribe dismissing the legal action. The district court ordered that the settlement agreement is "incorporated into the Judgment and made a part of the Judgment." *Nez Perce Tribe v. Idaho Power Co.*, Civ. No. 91-517, Judgment, Dkt. 96 (Mar. 21, 1997).

rights and treaty-based salmon protection has not produced a flood of litigation or constrained all development. With treaty rights and treaty-based salmon protection as the legal foundation, and with resort to litigation available when necessary to address fact-specific infringements to the treaty right, Oregon, Washington, Idaho, and Montana have productively worked with the Columbia River Treaty Tribes to benefit salmon, the Tribes, non-Indian fishermen, and the Columbia Basin region as a whole.[12]

VII. The Treaty-Reserved Fishing Right Is Integral To Collaborative Management Of The Fisheries Resource And The Habitat Upon Which It Depends In The Columbia River Basin.

The Columbia River Treaty Tribes understand their treaties to ensure that a state may no more significantly diminish the number of fish available for harvest through the fish-blocking culverts at issue here, than it may through devices such as state-licensed "fish wheels" (*Winans*), property law concepts that fail to acknowledge the supremacy of the treaty under the United States Constitution (*Winans*, *Seufert*), state license fees (*Tulee*), or general regulations (*Passenger Fishing Vessel*). This fundamental understanding of the treaties is grounded in the significance of the fish since time immemorial to the

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[12] Notably, Oregon did not join the multi-state *amici* brief in support of Washington.

Columbia River Treaty Tribes, the assurances provided by the United States at the treaty grounds and in the treaties, and is confirmed by the foregoing cases that address the history, substance, and character of the treaty fishing clause.

Significantly, the Columbia River Treaty Tribes' foundational understanding of the treaty fishing right is also reflected in the tangible history of acceptance by Oregon, Washington, and Idaho, of the Columbia River Treaty Tribes as co-managers of the fisheries resource in a full and active capacity.

In the Columbia River Basin, as foregoing cases illustrate, litigation has been necessary when a specific fact situation has arisen and there has been resistance to acting to protect the fisheries resource from significant degradation. In the Columbia River Treaty Tribes' experience, when a party resists the meaningful requirements of the treaty fishing right, legal proceedings are necessary to confirm the treaty right. Following such rulings, the Columbia River Treaty Tribes have found that the remedy phase provides parties an opportunity to address mutual interests. When a party refuses to take advantage of that opportunity or is reluctant to do so, courts, sitting in equity, must address injunctive relief.

The Columbia River Treaty Tribes and Oregon, Washington, and Idaho have spent more time over the last forty years as co-managers collaboratively managing the fisheries resource than as adversaries litigating their respective rights and responsibilities. The

Columbia River Treaty Tribes' role as fisheries co-managers, engaging pursuant to sovereign powers as stewards on a par with the states, has been part of the complex legal and social fabric of the Columbia River Basin for decades. Oregon, Washington, and Idaho have accepted the Columbia River Treaty Tribes' role as full co-managers of the fisheries resource. In this co-management relationship, the Columbia River Treaty Tribes have been working in concert with Oregon, Washington, and Idaho not simply to divide shares of fish harvest available each year, but to exercise their sovereign authorities and scientific expertise to protect productive fish habitat, take actions to restore that which has been degraded, and to build and operate salmon hatcheries to augment natural salmon production to provide a greater abundance of fish for Indian and non-Indian harvests, while rebuilding depleted salmon runs throughout the Columbia Basin.

These co-management efforts described below, do not supplant or foreclose the necessity of fact-specific judicial determinations where, as here, particular actions in a particular context pose a significant threat to the salmon population and the fishery. Such efforts do serve to illustrate that in the Columbia Basin, Oregon, Washington, Idaho, and Montana are all familiar with these collaborative efforts where treaty rights and treaty-based salmon protection are the underpinning.

A. *United States v. Oregon* Co-Management Agreements And Mutual Commitments By States And Tribes To Exercise Their Sovereign Powers To Protect, Rebuild, And Enhance Upper Columbia River Fish Runs.

In *United States v. Oregon*, each of the long-term management plans entered into by the parties and approved by the court since 1988 has expressly included an acknowledgment by the state and federal parties that the Columbia River Treaty Tribes' "sovereign powers" encompass more than a mere claim to a fair share of whatever fish run might be available. These "sovereign powers" of the tribes and states include rights to pursue restoration of depleted fish runs, and to use "habitat protection authorities" as one means of increasing fish abundance for shared harvest. As set forth at the outset of the 1988 *United States v. Oregon* Columbia River Fish Management Plan:

> The purpose of this management plan is to provide a framework within which the Parties may exercise their sovereign powers in a coordinated and systematic manner in order to protect, rebuild, and enhance upper Columbia River fish runs while providing harvests for both treaty Indian and non-Indian fisheries. The primary goals of the Parties are to rebuild weak runs to full productivity and fairly share the harvest of upper river runs between treaty Indian and non-Indian fisheries in the ocean and Columbia River Basin. As a means to accomplish this purpose, the Parties intend

> to use (as herein specified) habitat protection authorities, enhancement efforts, and artificial production techniques as well as harvest management to ensure that Columbia River fish runs continue to provide a broad range of benefits in perpetuity. By this Agreement, the Parties have established procedures to facilitate communication and to resolve disputes fairly. It is the intent of the Parties that these procedures will permit the Parties to resolve disputes outside of court and that litigation will be used only after good faith efforts to settle disagreements through negotiation are unsuccessful.

United States v. Oregon, Civ. No. 3:68-cv-00513 (D. Or., Mar. 11, 1988), Dkt. 1490.

In 2008, twenty years after agreeing to exercise their respective sovereign powers broadly to rebuild the fish runs of the Columbia Basin in the Management Plan, the *United States v. Oregon* parties renewed these same mutual commitments nearly verbatim[13] in the next long-term Management Agreement approved by the court. *Id.*, (D. Or. Aug. 11, 12, 2008), ECF 2546, 2547.

In 2018, the *United States v. Oregon* parties once again affirmed their co-management relationship,

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[13] The only changes made in the 2008-2017 Management Agreement to the previously-quoted language, were to refer to the "Management Agreement" (rather than the Management Plan) and to the fisheries as "treaty Indian and non-treaty fisheries."

verbatim,[14] and expressly acknowledged that each has sovereign powers to protect and enhance fish habitat, build and operate fish hatcheries, and undertake other enhancement activities in the 2018-2027 *United States v. Oregon* Management Agreement. *Id.*, (D. Or. Feb. 26, 2018), ECF 2607-1. Thus, these mutual commitments between the states and Columbia River Treaty Tribes in *United States v. Oregon* to exercise their sovereign powers to protect salmon habitat and rebuild salmon abundance will be extending through a fortieth year. These acknowledgments of sovereign authorities are most certainly in service of increasing harvest abundance. More importantly, and undeniably, these sovereign authorities, including the authority to restore degraded fish habitats, protect viable fish habitat, and to build and operate fish hatcheries, are different in kind from a mere right of the Tribes to share happenstance in the fortune (or famine) of whatever nature might provide in any given year, as now argued by Washington.

B. The Northwest Power Act's Acknowledgment Of Treaty Rights And Fishery Co-Management Responsibilities In Implementing Salmon Protection, Mitigation, And Enhancement Actions.

The Columbia River Treaty Tribes also work actively with Oregon, Washington, Idaho, and Montana

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[14] The 2018-2027 Management Agreement did not alter the language of the 2008-2017 Management Agreement; stylistically, it made each sentence a paragraph.

through the Northwest Power and Conservation Council (Council). The Council was established under the Northwest Power Act, enacted by Congress in 1980. The Northwest Power Act directs the Council to develop a program to "protect, mitigate, and enhance fish and wildlife, including related spawning grounds and habitat, on the Columbia River and its tributaries . . . affected by the development, operation, and management of [hydroelectric projects] while assuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply." 16 U.S.C. § 839b.

The Northwest Power Act requires the Council to adopt a fish and wildlife program that gives a "high degree of deference" to recommendations by the region's fishery managers for the content of that program. *See N.W. Resource Info. Ctr. v. N.W. Power Planning Council*, 35 F.3d 1371 (9th Cir. 1994) (*NRIC*). Notably, Congress put the fishery management authorities and expertise of the Columbia River Treaty Tribes on a par with that of Oregon, Washington, Idaho, and Montana. *Id.* The Council, and the courts, interpret the roles, expertise, and authorities of state fish and wildlife agencies and the Columbia River Treaty Tribes as equal for purposes of implementing the Northwest Power Act. *Id.* The Northwest Power Act includes substantive standards that the four-state Council must adhere to as it crafts the fish and wildlife program. *Id.* at 1389-93. One such standard relates to the treaty rights of the Columbia Basin Treaty Tribes, as the Northwest Power Act requires that any fish and wildlife program adopted by the Council "be consistent

with the legal rights of appropriate Indian tribes in the region." 16 U.S.C. § 839b(h)(6)(D).

In 1992, the Council adopted a fish and wildlife program pursuant to the Northwest Power Act entitled *A Strategy for Salmon*, 56 Fed. Reg. 56,935, 56,936 (1992). The Yakama Nation challenged the *Strategy for Salmon*, argued in *NRIC* that the Council had failed to adopt its recommendations for Columbia River water management at and through the federal dams on the Columbia River system. The Yakama Nation had joined with other state and tribe fishery managers in recommending water management at the federal dams that would better protect salmon in the Columbia Basin, and in particular, fall Chinook salmon that originate from the Snake River. The *NRIC* court exhaustively reviewed the history of the Northwest Power Act, and then examined whether the Council had complied with its substantive standards, including the requirement that the state compact agency adopt programs that are consistent with the legal rights of Indian tribes. The court stated:

> The fourth criterion [in the Northwest Power Act] requires that measures "be consistent with the legal rights of appropriate Indian tribes in the region." 16 U.S.C. § 839b(h)(6)(D). Congress recognized the preexisting rights that tribes reserved for themselves, in contrast to rights granted to them by the Government. In this light, it is reasonable to conclude that measures that would allow the extinction of Snake River fall chinook, for instance, upon which the Yakima people largely depend for

> their livelihood, may very well be inconsistent with the Yakima Nation's treaty reserved fishing rights. *See Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. at 674-82, 99 S.Ct. at 3068-72. We note this possibility only to sensitize the parties to this Court's duty to honor the purposes of the Act while, at the same time, strictly construing its language.

NRIC, 35 F.3d at 1392.

NRIC stands for the proposition that Congress understands the Columbia River Treaty Tribes to possess legally protectable rights to a viable fisheries resource, coupled with a "responsibility" to manage that resource as co-equal partners with state fish and wildlife agencies:

> Congress recognized, in particular, that fish and wildlife issues were, and should be, outside the expertise of the Council and the hydropower regulating agencies. Nonetheless, the need for experience and expertise with respect to fish and wildlife was plain. Looking to those having responsibility for managing such resources, Congress found the experience and expertise on which the Council should rely to frame a fish and wildlife program. Accordingly, Congress required in §839b that fishery managers be given a high degree of deference in the development of a fish and wildlife program for the Basin.
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> * * *

> We find it inherently reasonable to give agencies and tribes, those charged with the responsibility for managing our fish and wildlife, a high degree of deference in the creation of a program and the interpretation of the Act's fish and wildlife provisions.

Id. at 1388-89.

The Council has updated and amended its fish and wildlife program several times since the 1992 *Strategy for Salmon* at issue in *NRIC*. The Columbia Basin Fish and Wildlife Program currently in force includes statements demonstrating the parity between state and tribal sovereigns and the relationship of the Act and the Program to the rights of the Columbia Basin Treaty Tribes:

> **Role of fish and wildlife agencies and tribes.** The Act envisions a strong role for the state and federal fish and wildlife agencies and the basin's Indian tribes in developing the provisions of this program. The Council's program is to include measures, mostly recommended by the fish and wildlife agencies and tribes, that the Council determines "complement the existing and future activities of the Federal and the region's State fish and wildlife agencies and appropriate Indian tribes" and that will "be consistent with the legal rights of appropriate Indian tribes in the region."
>
> **Rights of Indian tribes.** The Council recognizes that Indian tribes in the Columbia River Basin are sovereigns with governmental

> rights over their lands and people and with rights over natural resources that are reserved and protected in treaties, executive orders, and federal statutes. The United States has a trust obligation toward Indian tribes to preserve and protect these rights and authorities. Nothing in this program is intended to affect or modify any treaty or other right of an Indian tribe. The Act and the fish and wildlife program are intended instead as an effort in part to assist the Indian tribes in realizing their treaty and other rights and responsibilities with regard to fish and wildlife. Thus the Council also recognizes that implementation of this program will require significant interaction and cooperation with the tribes. The Council commits to work with the tribes in a relationship that recognizes the tribes' interests in co-management of affected fish and wildlife resources and respects the sovereignty of tribal governments.

Northwest Power and Conservation Council, *2014 Columbia River Basin Fish and Wildlife Program* at 16, https://www.nwcouncil.org/media/7148624/2014-12.pdf (adopted in 2015, 80 Fed. Reg. 16,463 (Mar. 27, 2015)).

In concert with their *United States v. Oregon* co-management agreements, the Columbia River Treaty Tribes have focused on collaboration with Oregon, Washington, Idaho, and Montana (and their constituent counties and local governments) to protect and restore fishery habitats across the Columbia River Basin. The fish and wildlife program adopted by the Council has provided a vehicle through which the

Columbia River Treaty Tribes have shared their expertise and the funding resources that they are positioned to access under the Northwest Power Act. For example, in the Salmon River subbasin, where the Nez Perce Tribe has Treaty-reserved fisheries, the Nez Perce Tribe joined with state and federal agencies, counties, agricultural interests, and other stakeholders to craft a scientifically sound plan to protect and restore fish habitat in the Salmon River (tributary to the Columbia River) while acknowledging the unique economic and cultural integrity of the communities and people directly involved. This "Salmon River Subbasin Plan" is a formal part of the Council's fish and wildlife program, and its Executive Summary describes the collaborative effort:

> The Planning Team was composed of representatives from government agencies with jurisdictional authority in the subbasin, tribes, fish and wildlife managers, county and industry representatives, and private landowners. The Planning Team guided the public involvement process, develop[ed] the vision statement, reviewed the biological objectives, and participate[d] in prioritizing subbasin strategies. Regular communication among and input by team members occurred throughout the planning process.

https://www.nwcouncil.org/media/119926/Salmon_Subbasin_Management_Plan.pdf.

The Salmon River Planning team members included not only expert fisheries managers with

jurisdiction over fisheries management, such as the Nez Perce Tribe, the Idaho Department of Fish and Game, and United States Fish and Wildlife Service, but also local governments and private citizens including Custer County, Adams County, Lemhi County, Idaho Association of Soil and Water Conservation Districts, Idaho Cattle Association, Idaho Women in Timber, and twelve individuals identified as ranchers or landowners in the counties covered by the plan. *Id.* The Salmon River Subbasin Plan includes the following statements that describe the shared vision and the principles upon which they founded the restoration plan for the Salmon River:

> The Planning Teams developed the vision and guiding principles for the *Salmon Subbasin Management Plan* during the fall of 2004. The vision presents the Planning Teams' desirable future for the subbasin. The guiding principles supplement, clarify and contextualize the vision. These principles are not listed in order of their ranking; they are meant to be understood as important and interconnected.
>
> 2.1 Vision Statement: The vision for the Salmon Subbasin is a productive and sustainable ecosystem that is resilient to natural and human disturbance, with diverse, native aquatic and terrestrial species, which will support long-term sustainable resource-based activities and harvest goals, while managing the impacts and needs of a growing human population.

> 2.2 Guiding Principles • Respect, recognize, and honor all legal rights, legal authorities, jurisdictions and reserved treaty rights, including private property rights, while recognizing local culture and custom. • Protect, enhance, and restore habitats to sustain and recover native aquatic and terrestrial species diversity and abundance with emphasis on the recovery and delisting of Endangered Species Act listed species. • Foster ecosystem stewardship of natural resources, recognizing all components of the ecosystem, including the human component. • Provide opportunities for local natural resource-based economies to coexist and participate in recovery of aquatic and terrestrial species. • Promote and enhance local participation in, and contribution to, information and education, natural resource problem solving, and subbasin[-] wide conservation efforts to promote understanding and appreciation of healthy and properly functioning ecosystems. • Identify and prioritize opportunities to utilize resources to implement the Salmon Subbasin Plan, Pacific Northwest Electric Power Planning and Conservation Act, and local, state, federal, and tribal programs. • Develop a scientific foundation to diagnose ecosystem problems, design, prioritize, monitor, and evaluate management to better achieve Plan objectives. • Enhance species populations to healthy levels that support tribal treaty and public harvest goals.

Id.

A similar, collaborative process has been employed by the Columbia River Treaty Tribes and incorporated in the Council's subbasin plans across Oregon, Washington, and Idaho, engaging states, counties, and local agricultural industry throughout the Columbia River Basin. The Council has adopted 59 subbasin plans (all for tributary rivers within the Columbia Basin) in its fish and wildlife program. The Columbia River Treaty Tribes have played a key role in organizing state and local interests to develop collaborative salmon habitat restoration plans, and they have diligently pursued funding for the cooperative implementation of these plans.

The Columbia River Treaty Tribes support the United States and the Respondent Tribes before this Court, as they did in the district court proceeding, most importantly because the legal basis of the district court's orders is well established in the extensive jurisprudence interpreting the Stevens treaties' fishing clause. The district court ruling addressed the specific facts before it concerning Washington's barrier culverts and did not create a "new" right; rather, the right to protect the treaty-secured fishery itself, and the corresponding duty imposed on Washington, has always been part of the Stevens treaties.

The Stevens treaty fishing right, and its treaty-based salmon protections, are integral to efforts to collaboratively manage the fisheries resource and the habitat upon which it depends. Such collaborative efforts do not supplant or foreclose the necessity of fact-specific judicial determinations where, as here, particular actions in a particular context pose a significant threat to a treaty-reserved fishery. Such efforts do serve to illustrate that the recognition of and respect for a meaningful Treaty right has underpinned productive action that has benefited the resource, the Tribes, non-Indian fishermen, and the Columbia River region as a whole.

CONCLUSION

The judgment of the court of appeals should be affirmed.

Respectfully submitted.

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No. 17-269

IN THE

Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES, ET AL.,

Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit

BRIEF *AMICUS CURIAE* OF HON. DANIEL J. EVANS IN SUPPORT OF RESPONDENTS

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QUESTION PRESENTED

The question presented in this case is whether the State of Washington has an obligation to protect and restore critical habitat for treaty-protected salmon runs that is otherwise blocked by actions of a state agency.

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INTEREST OF *AMICUS CURIAE* DANIEL J. EVANS[1]

DANIEL J. EVANS is a former Governor of the State of Washington, and a former United States Senator. Senator Evans was a member of the Washington State House of Representatives from 1957-1965. He served as governor of the State of Washington from 1965 to 1977. From 1982 to 1983 Senator Evans served as first Chairman of the Pacific Northwest Electric Power and Conservation Council, an interstate compact agency established under the Pacific Northwest Electric Power Planning and Conservation Act, Pub. L. No. 96-501, with responsibility to prepare a program to protect, mitigate and enhance the fish and wildlife resources of the Columbia River Basin. He was a United States Senator from Washington from 1983 to 1989. Senator Evans served as a member of the Senate Energy and Natural Resources Committee during his tenure as a United States Senator, and as Vice Chairman of the Senate Select Committee on Indian Affairs.

Senator Evans submits this Brief in support of the Respondents United States, *et al.* Senator Evans offers his perspective as a former elected official, especially as Governor of Washington during earlier proceedings leading up to the above-captioned matter. Senator Evans asks the Court to affirm the decision below.

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[1] This brief is filed with the written consent of all parties through blanket or individual letters of consent on file with the Clerk. No counsel for either party authored this brief in whole or in part, nor did any party or other person make a monetary contribution to the brief's preparation or submission.

INTRODUCTION AND SUMMARY OF ARGUMENT

In the 1850s the United States Government signed treaties with the Indian tribes of Washington territory to extinguish their land title over most of territory. Under the treaties the tribes reserved the right to continue fishing "in common with" the non-Indian citizens of the territory. The controversy over allocation of salmon between Indian and non-Indian fishers has continued intermittently since shortly after the treaties were signed.

Throughout its history the State of Washington, through legislative enactment or initiative, has adopted laws that – intended or not – discriminated against the exercise by Indian people of their fishing rights under the treaties. After decades of litigation, the tribes have, for the most part, prevailed. Nevertheless, the State has continued to resist the fulfillment of treaty rights to fish. Generally, the State and tribes resolve harvest allocation issues through negotiation. And, for the most part, the State and tribes have a history of working together on habitat issues as well.

In the present case, however, the State of Washington, acting through the Washington Department of Transportation, has refused to repair or replace hundreds of culverts under state-maintained roads. These culverts block access to important spawning and rearing habitat for several species of salmon and steelhead, thereby causing significant harm to these species.

ARGUMENT

1. The State of Washington Undermines the Efforts of Others – Including Other State Agencies – By Failing to Protect and Restore Salmon Runs

The commitment of the Pacific Northwest as a region to protect and restore its salmon runs is unparalleled. Congress has appropriated hundreds of millions of dollars on this effort, in the Columbia River Basin, on Puget Sound and in the region's coastal rivers. In 1980, Congress authorized and directed the four Pacific Northwest states to establish the Northwest Power Planning Council to engage in planning for the region's electric power and energy needs and to protect, mitigate and restore fish and wildlife affected by development of the region's hydroelectric resources. Pacific Northwest Electric Power Planning and Conservation Act. Pub. L. No. 96-501. *Amicus* served as the first Chairman of the Northwest Power Planning Council. During his term as Chairman the Council adopted its far-reaching Columbia Basin Fish and Wildlife Program, which calls for further expenditure of ratepayer funds, collected on the sale of electric power and energy by the Bonneville Power Administration.

Likewise, the State of Washington has embarked on an ambitious effort to protect and restore salmon runs and salmon habitat. The State enacted the Salmon Recovery Act, which provides funding through its Salmon Recovery Funding Board to state, local and tribal government entities and non-governmental organizations to protect and restore salmon habitat. WASH REV. CODE Ch. 77.85. In

2007, the State of Washington enacted legislation to create the Puget Sound Partnership, and new state agency to coordinate and lead the effort to restore and protect Puget Sound, including its salmon resources and their habitat. WASH REV. CODE Ch. 90.71, 2007 Wash. Sess. Laws, Ch. 341. The Washington Legislature explicitly declared its intention that all governmental entities, including federal and state agencies, tribes, cities, counties, ports, and special purpose districts, support and help implement the partnership's restoration efforts. WASH REV. CODE § 90.71.200. The Puget Sound Partnership has adopted an aggressive Action Agenda that calls for significant investments in salmon habitat restoration. *See* http://www.psp.wa.gov/action-agenda-document.php. Through the Washington Department of Natural Resources (WDNR), the State provides funding to replace culverts under local and private roads. The WDNR's Family Forest Fish Passage Program (FFFPP) assists private forestland owners in removing culverts and other stream crossing structures that keep trout, salmon, and other fish from reaching upstream habitat. Road culverts and other structures that are aging, too small, or improperly installed can block fish from reaching their spawning grounds, and young rearing salmon from reaching the ocean. The program funds the replacement of eligible barriers with new structures. *See* https://www.dnr.wa.gov/fffpp.

Local governments also are investing millions of dollars of taxpayer funds and adopting regulations to protect and restore salmon habitat. Much of this work is intended to forestall more rigorous protections compelled under the federal Endangered

Species Act, 16 U.S.C. §§ 1531-1544. Likewise, Washington's Growth Management Act compels Washington's largest and fastest growing counties to adopt measures to protect critical habitat for salmon. WASH REV. CODE § 36.70A.710. Some counties and tribes, such as those who participate in the Hood Canal Coordinating Council, have accepted responsibility to serve as lead entities for recovery of endangered salmon species, and have spent countless hours and precious resources preparing integrated watershed management plans for areas within their jurisdiction. *See e.g.*, http://hccc.wa.gov/ (Hood Canal Coordinating Council). Other organizations, such as the Lower Columbia Fish Recovery Board, represent unique partnerships of local governments, Indian tribes, private companies and non-governmental entities to protect and restore precious salmon resources. *See e.g.*, https://www.lcfrb.gen.wa.us/ (Lower Columbia Fish Recovery Board).

Finally, several non-governmental organizations work to protect and enhance salmon habitat. Examples include the Washington Wildlife and Recreation Coalition, which *Amicus* co-founded in 1989 with the late former Governor Mike Lowry, Forterra, Long Live the Kings, and Stewardship Partners, all of which promote public-private partnerships and bipartisan efforts to promote salmon recovery. *See e.g.*, https://forterra.org/ (Forterra); https://lltk.org/ (Long Live the Kings); https://www.stewardshippartners.org/ (Stewardship Partners); https://wildliferecreation.org/ (Washington Wildlife and Recreation Coalition).

The people of the Pacific Northwest have embraced sound science to guide their actions – and

investments – to protect and restore salmon and salmon habitat. Federal, state, local and tribal entities have prepared limiting factors analyses for every major watershed in the region. Inadequate or failing culverts are identified as a significant limiting factor in almost every watershed. This is further emphasized in a document that State and federal fisheries biologists prepared for Judge Boldt in 1973. It says, simply, "To protect the spawning and rearing environment while not providing free access for the adults or unhindered outmigration for the Juveniles would, of course, be pointless." Joint Statement Regarding the Biology, Status, Management, and Harvest of the Salmon and Steelhead Resources of the get Sound and Olympic Peninsula Drainage Areas of Western Washington 17-18 (1973), J.A. at 487a, Washington v. United States, No. 17-269 (2017).

Given this commitment it is astounding that one entity with responsibility for much of this problem – the Washington Department of Transportation – objects to meaningful participation in regional, state and local salmon recovery. The physical condition of many State-maintained culverts undermines the efforts of other entities to protect and restore salmon. The district court properly directed the State Department of Transportation to take corrective action, in a timely manner.

2. The State of Washington's Recalcitrance to Comply With the Lower Court's Injunction Foments Unnecessary Social Unrest and Disrespect for the Rule of Law

Sadly, the State of Washington has a long history of intransigence when it comes to implementation of

the treaties in question in the present case. The State's intransigence is documented in *United States v. Washington*, 520 F.2d 676, 693 (9th Cir. 1975) (Burns, J., concurring), *cert denied*, 423 U.S. 1086 (1976), and in *Puget Sound Gillnetters Ass'n v. U.S. District Court*, 573 F.2d 1123 (9th Cir. 1978). In the latter case, after noting the State's continued efforts to attack the judgment in United States v. Washington, they made the following observation:

> The state's extraordinary machinations in resisting [the lower court's] decree have forced the district court to take over a large share of the management of the state's fishery in order to enforce its decrees. Except for some desegregation cases ... the district court has faced the most concerted official and private efforts to frustrate a decree of a federal court witnessed in this century. The challenged orders in this appeal must be reviewed by this court in the context of events forced by the litigants who offered the court no reasonable alternative.

Puget Sound Gillnetters Ass'n., 573 F.2d at 1126. At the time, the State's well-publicized reluctance fomented resistance by non-Indian citizens to enforcement of the treaties. *Puget Sound Gillnetters Ass'n*, 573 F.2d at 1128.

Amicus served as governor of Washington State during the years immediately following the first lower court decision in United States v. Washington. *Amicus* experienced first-hand the tension between Indian and non-Indian fishers. This tension is an

understandable result of conflict over a dwindling resource. But conflicts between these two groups lead to serious racial tension that the State should strive to avoid. The Ninth Circuit has noted on several occasions that the treaties established something analogous to a cotenancy in the off-reservation fishery. The Court also has noted that the distinction between the members of each groups of persons with shared ownership is political rather than racial. As the Court explained, "ethnic origin is relevant only to the degree it happens to define tribal, and their political, status." *Puget Sound Gillnetters Ass'n*, 573 F.2d at 1130. Nevertheless, racial tension is unavoidable since one group shares a racial characteristic that the other group does not.

In its brief the State makes several arguments to avoid responsibility for its part in protecting and recovering salmon and their habitat. The philosophy is referred to in literature as "the tragedy of the commons." *E.g.*, G. Hardin, The Tragedy of the Commons, 162 Science 1243 (1968). It is inappropriate for the State of Washington, which is the owner of the resource, to argue that it has no responsibility to protect treaty resources since others too are causing harm.

In the treaties the tribes agreed to share, "in common with the citizens of the territory," the abundant fishery resources of the territory, and they reserved for themselves the right to continue fishing at their "usual and accustomed" fishing places. Thus the tribes and their non-Indian neighbors – and their relationship to the region's salmon and steelhead – were inextricably linked. For this reason, it is patently unfair, and inappropriate, for the State to

attempt to blame Washington's Indian tribes for imposing an unreasonable economic burden on the State.

3. The State of Washington's Position Before This Court Conflicts With Its Responsibility To All the State's Citizens to Protect and Restore Salmon and Salmon Habitat

The State of Washington has an obligation to protect and restore the State's salmon and their habitat. The Washington courts hold that fish within the State's borders, so far as title can be asserted, belong to the state in its sovereign capacity in trust for its citizens. *See e.g., Washington Kelpers Assn. v. State*, 81 Wash. 2d 410, 414-15 502 P.2d 1170, 1172-73 (1972), *cert. denied* 411 U.S. 982 (1973); *Bacich v. Huse*, 187 Wash. 2d 75, 79-80, 59 P.2d 1101, 1103-04 (1936). Many stocks of salmon in the Puget Sound are listed under the Endangered Species Act. The Act prohibits the State from causing a taking of any listed species. 16 U.S.C. § 1538.

The State of Washington has a stewardship responsibility to its citizens – Indian and non-Indian alike – to protect and conserve its natural resources for the benefit of future generations. There is no question under the facts of this case that the current condition of the State's road culverts is causing serious harm to its salmon resources. The State's position in this case is inconsistent with its stewardship responsibility.

CONCLUSION

When considering the obligations of the federal government to our native people, a Justice of this

Court once observed that "Great nations, like great men, should keep their word." *Federal Power Commission v. Tuscarora Indian Nation*, 362 U.S. 99, 142 (1960) (Black, J. dissenting). The same is true with States, which have a solemn obligation to protect the rights of native citizens. Furthermore, the State of Washington – including all its elected officials and other officers – is responsible to all its citizens – Indian and non-Indian alike – to protect our natural resources for the benefit of future generations.

Respectfully submitted,

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STATE OF WASHINGTON,

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On Writ Of Certiorari To The United States Court Of Appeals For The Ninth Circuit

BRIEF OF AMICI CURIAE STATES OF IDAHO, INDIANA, KANSAS, LOUISIANA, MAINE, MICHIGAN, MONTANA, NEBRASKA, OKLAHOMA, WISCONSIN AND WYOMING IN SUPPORT OF PETITIONER

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Wesley James Furlong, *Restoring the Skagit River Delta: Habitat Restoration and Farmland Reclamation on Fir Island*, 38 Pub. Land & Resources L. Rev. 103 (2017) 18

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INTEREST OF THE AMICI CURIAE STATES

The interest of the amici curiae states rests on perhaps the most basic tenet of the United States Constitution: the several States retain primary responsibility in our Union for ensuring that the interests of all their residents are protected. U.S. Const. amend. X. Discharging that responsibility requires them to make often difficult choices about how best to use their limited fiscal resources. Whatever balance they strike inevitably displeases some, with their political and occasionally judicial branches providing the mechanism for restriking that balance. Although federal law can limit the States' sovereign authority, U.S. Const. art. VI, cl. 2, stringent preemption standards apply to Congressional action when it legislates "in a field which States have traditionally occupied." *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947). Indian treaties – like those here – can alter this standard because they must "be construed, not according to the technical meaning of its words to learned lawyers, but in the sense in which they would naturally be understood by the Indians." *Jones v. Meehan*, 175 U.S. 1, 11 (1889). "But even Indian treaties cannot be re-written or expanded beyond their clear terms to remedy a claimed injustice or to achieve the asserted understanding of the parties." *Choctaw Nation v. United States*, 318 U.S. 423, 432 (1943).

This case involves, as an immediate matter, the last of those principles. The Ninth Circuit has plainly "expanded" the fishing clause in the Stevens treaties "beyond [its] clear terms" as definitively construed by

this Court in *Washington v. Washington State Commercial Passenger Fishing Vessel Association*, 443 U.S. 658 (1979) (*Fishing Vessel*), to imply what a prior Ninth Circuit panel and commentators characterize as an "environmental servitude." Pet.App. 29a. The Ninth Circuit approved a district court injunction that effectively seizes federal judicial control over the Washington State Highway system but leaves the fiscal burden on the State to the tune of a billion-plus dollars, thereby ignoring federalism-based limitations on injunctive relief repeatedly endorsed by this Court.

While the Ninth Circuit decision eviscerates internal governance by one State over one program, it writes a script for subjecting a broad swath of regulation by States, including the amici curiae, to like servitudes. Two-thirds of the States contain Indian reservations or other Indian country established by treaty or statute. Conference of W. Att'ys Gen., *American Indian Law Deskbook* § 5:16, at 331 (West 2017). Tribal fishing, hunting, and gathering rights, both on and off reservation, exist in many of them. Under the Ninth Circuit's reasoning, a servitude on state land-use (and other) regulation can be *implied* to avoid negative impacts on such rights through generally applicable, non-discriminatory regulation (as the Washington culvert program concededly is). The amici's concerns are not apocalyptical. The Environmental Protection Agency (EPA) has relied on the decision below to impose federal, rather than state, water quality standards (WQS) in Maine and Washington insofar as they applied to waters where it deemed subsistence

fishing or sustenance rights existed. The amici States ask this Court to reject the Ninth Circuit's unprecedented foray into commandeering state decision-making processes over land use regulation or other areas of traditional state responsibility.

SUMMARY OF THE ARGUMENT

1. States have a fundamental sovereign interest in treaty or statutory provisions affecting natural resources being applied consistently with their plain scope and not expanded to create wholly new rights. The Ninth Circuit opinion breaks ground by interpreting the Stevens treaties' fishing clause to prohibit States or presumably other local governmental entities from taking land use or other regulatory actions, or to compel such entities to undo past actions, that may adversely affect the amount of the harvestable fish – i.e., imposing an "environmental servitude." The Ninth Circuit's expansive interpretation is doubly troubling because it directly conflicts with *Fishing Vessel*'s authoritative construction that the treaty provision's twin purposes are to provide access to aboriginal fishing grounds and to apportion otherwise available harvestable fish between tribal members and nonmembers. *Fishing Vessel* used the "moderate living" standard only as a limit on the tribal share, not a treaty-secured entitlement which Washington must take remedial action to help achieve. The Ninth Circuit then compounded its misreading of *Fishing Vessel* by failing to identify any standard, other than a

subjective ad hoc assessment, against which to determine the types of state, local government or private activity that may infringe impermissibly on the fishing clause. The appropriate standard, however, is clear: The fishing clause protects tribal fishers from governmental or private conduct that interferes with their opportunity to harvest an equitable share of the otherwise available fish. The Ninth Circuit additionally erred in relying on reserved water right doctrine as support for its interpretation of the fishing clause. This Court's relevant precedent leads to precisely the opposite conclusion because both *Fishing Vessel* and the reserved rights doctrine have as their objective equitable distribution of extant natural resources. Lastly, the Ninth Circuit's reasoning has far-reaching impact as reflected by EPA's recent reliance on it in imposing federal water quality standards under the Clean Water Act (CWA), 33 U.S.C. §§ 1251-1388, based upon statutory and treaty fishing rights in Maine and Washington and by the spate of academic commentary on the district court's and the Ninth Circuit's decisions that recognizes their far-reaching implications.

2. The United States' pre-2001 conduct plainly falls within the scope of laches, waiver and estoppel as those equitable defenses are defined under federal common law. Washington has constructed culverts as part of its road building activities for many decades. In that regard, the Washington State Department of Transportation (WSDOT) partnered with the Federal Highway Administration (FHWA) in these activities and used FHWA culvert design standards as a

condition of federal funding. Washington eventually improved upon those standards, with the FHWA eventually adopting the Washington improvements for use on federal lands. Washington additionally received CWA permits in connection with its culvert construction. Notwithstanding this lengthy partnership and regulatory compliance, the Ninth Circuit rejected as a matter of law Washington's waiver and estoppel defenses against the United States as categorically foreclosed by *Cramer v. United States*, 261 U.S. 219 (1923). In so doing, it confined *City of Sherrill v. Oneida Indian Nation*, 544 U.S. 197 (2005) (*Sherrill*), to claims brought by tribes over long-abandoned lands and created a conflict with decisions from the Second Circuit. The facts here, which involve the attempt by the United States to impose liability on a State for sovereign activity that the federal government had actively participated in over many years, provide ample justification for extending *Sherrill* beyond claims raised by a tribal sovereign. This Court's holding in *Cramer*, in contrast, arose from a failure by agency employees to adhere to established departmental policy in leasing a parcel of land to a railroad, not from decades-long federal-state cooperation to further the public interest. If the first question is resolved negatively to Washington's position, this matter should be remanded to the lower courts for consideration of its equitable defenses on the basis of a full evidentiary record.

3. The district court issued, and the Ninth Circuit affirmed, an expansive permanent injunction that departs from settled boundaries on appropriate

coercive relief against States or their officials for several reasons. First, the relief ordered massive changes to the state culvert system under a single, general criterion, not through a culvert-specific assessment of benefit and cost. It thus violates the core requirement that injunctive relief be tailored as narrowly as possible to remedying the conduct that causes the legal wrong. Second, the injunction's elaborate detail, broad scope and exorbitant cost replace Washington's ongoing efforts to remediate its culverts' impact on salmon passage with ongoing judicial management. The relief ignores limits on the federal judiciary's injunctive powers to control a State's sovereign authority over its governmental programs and, necessarily, how and when state funds are expended. Third, neither the district court nor the Ninth Circuit considered the equitable considerations raised by Washington in its waiver and estoppel defenses in fashioning the relief. This Court has made clear that even when such defenses do not constitute a complete bar to injunctive relief, they retain relevance to the scope of such relief. At the least, therefore, the permanent injunction should be vacated, and the case remanded for further proceedings to fashion relief consistent with the Court's opinion.

ARGUMENT

I. THE NINTH CIRCUIT'S IMPLICATION OF AN ENVIRONMENTAL SERVITUDE FROM THE TREATY FISHING PROVISION BOTH CONFLICTS WITH *FISHING VESSEL* AND, IF UPHELD, WILL BE EXTENDED TO A BROAD RANGE OF STATE AND LOCAL GOVERNMENT REGULATORY DECISION-MAKING

A. Isaac I. Stevens and Joel Palmer, then Superintendents of Indian Affairs for Washington and Oregon Territories, entered into ten treaties with Pacific Northwest Indian tribes between December 1854 and July 1855, each of which reserved on- and off-reservation hunting, fishing and other usufructuary rights in largely comparable language. *See, e.g.*, Treaty with Nisquallys (Treaty of Medicine Creek), art. III, 10 Stat. 1132, 1133 (Dec. 26, 1854) ("The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians, in common with all citizens of the Territory.").[1] The fishing rights reserved under the Stevens treaties exist in Idaho, Montana, Oregon and Washington. Their scope and application have spawned substantial litigation over the last half century, with much of it now centered in two federal district court proceedings – this case and *United States*

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[1] Isaac Stevens signed seven of the treaties alone, including the Treaty of Medicine Creek. Joel Palmer signed one treaty alone. They jointly signed two treaties. *See American Indian Law Deskbook* § 9:13, at 647 n.1. All contain identically or similarly-worded fishing clauses and are referred to as the Stevens treaties in this brief.

v. Oregon, No. 3:68-cv-513-KI (D. Or.). One Ninth Circuit panel, comparing the litigation below to the generations-long Chancery will dispute in *Bleak House*,[2] observed that "this case has become a Jarndyce and Jarndyce, with judges dying out of it and whole Indian tribes being born into it." *United States v. Washington*, 573 F.3d 701, 709 (9th Cir. 2009). The panel further observed that "the Constitution does not establish the district courts as permanent administrative agencies." *Id.*

Notwithstanding the length of the *United States v. Washington* proceeding below, this Court has addressed issues arising from it only in *Fishing Vessel*. Six decisions construing the fishing clause, however, preceded *Fishing Vessel*. *United States v. Winans*, 198 U.S. 371, 381-82 (1905); *Seufert Bros. Co. v. United States*, 249 U.S. 194, 198 (1919); *Tulee v. Washington*, 315 U.S. 681, 685 (1942); *Puyallup Tribe v. Dep't of Game*, 391 U.S. 392, 398 (1968) (*Puyallup I*); *Dep't of Game v. Puyallup Tribe*, 414 U.S. 44, 48 (1973) (*Puyallup II*); and *Puyallup Tribe, Inc. v. Dep't of Game*, 433 U.S. 165, 177 (1977) (*Puyallup III*). The decisions, while separated by over 70 years and applying the fishing clause in differing factual contexts, share a common thread: All construed the clause as reserving tribal access to historic fishing places and to harvest a share of available fish. The Ninth Circuit re-wrote this Court's construction by imposing a burden on the State to increase the *amount* of harvestable fish; i.e., it

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[2] Charles Dickens, *Bleak House* (Bradbury & Evans 1853).

augmented the share-of-the-pie entitlement with a duty to increase the pie's size. Only this departure from the Court's consistent construction of the clause allowed the Ninth Circuit to create the environmental servitude that lies at the heart of this case.

B. Beginning with the *Puyallup* trilogy, the issue took on its modern shape of accommodating the competing demands of Indian and non-Indian fishermen to salmon and steelhead runs. As this Court would later state in *Fishing Vessel*, "it is fair to conclude that when the treaties were negotiated, neither party realized or intended that their agreement would determine whether, and if so how, a resource that had always been thought inexhaustible would be allocated between the native Indians and the incoming settlers when it later became scarce." 443 U.S. at 669.

Puyallup I addressed Washington's power to enforce against treaty fishermen a generally applicable prohibition of using set nets in fresh water streams or their mouths where, as one state expert testified, returning adults often milled and entire runs became vulnerable to harvest. 391 U.S. at 401. This Court upheld the State's right to establish "'reasonable and necessary'" conservation measures but left to Washington state courts resolution in the first instance of whether the net prohibition satisfied that standard consistently with the "in common with" requirement of the treaty fishing clause. *Id.* at 401-02. When the dispute returned in *Puyallup II*, the conservation issue had been winnowed down to whether a prohibition of all set net fishing – a traditional form of tribal fishing

– on the Puyallup River violated the "in common with" requirement. The Court found discrimination "because all Indian net fishing is barred and only hook-and-line fishing, entirely pre-empted by non-Indians, is allowed." 414 U.S. at 48. It remanded for expert estimation of "what degree of net fishing plus fishing by hook and line would allow the escapement of fish necessary for perpetuation of the species" and counseled that "[i]f hook-and-line fishermen now catch all the steelhead which can be caught within the limits needed for escapement, then that number must in some manner be fairly apportioned between Indian net fishing and non-Indian sports fishing so far as that particular species is concerned." *Id. Puyallup III* completed the litigation's cycle, affirming a state court judgment that limited the number of steelhead available for harvest by Indian net fishing as the river passed through the Puyallup Reservation. 433 U.S. at 176 ("Though it would be decidedly unwise, if Puyallup treaty fishermen were allowed untrammeled on-reservation fishing rights, they could interdict completely the migrating fish run and 'pursue the last living (Puyallup River) steelhead until it enters their nets.' . . . In this manner the treaty fishermen could totally frustrate both the jurisdiction of the Washington courts and the rights of the non-Indian citizens of Washington recognized in the Treaty of Medicine Creek.") (citation and footnote omitted).

Fishing Vessel built directly upon the *Puyallup* trilogy in construing the fishing clause and left no doubt about the clause's meaning. 443 U.S. at 682-84.

This Court characterized as "totally foreign to the spirit of the negotiations" the contention, proffered by one state agency, that the phrase "in common with" simply meant "[t]hat each individual Indian would share an 'equal opportunity' with thousands of newly arrived settlers" to fish. *Id.* at 676. Rather, "the purpose and language of the treaties are unambiguous; they secure the Indians' right to take a share of each run of fish that passes through tribal fishing areas." *Id.* at 679. The Court buttressed this conclusion, explaining that the *Puyallup* cases "clearly establish[ed] the principle that neither party to the treaties may rely on the State's regulatory powers or on property law concepts to defeat the other's right to a 'fairly apportioned' share of each covered run of *harvestable* anadromous fish." *Id.* at 682 (emphasis added). Turning to the question of what the "share" should be, this Court "agree[d] with the Government that an equitable measure of the common right should initially divide the *harvestable* portion of each run that passes through a 'usual and accustomed' place into approximately equal treaty and nontreaty shares, and should then reduce the treaty share if tribal needs may be satisfied by a lesser amount." *Id.* at 685 (emphasis added). It even defined the term "harvestable" as the "amount of fish" remaining after "subtracting from the total number of fish in each run the number that must be allowed to escape for conservation purposes." *Id.* at 670 n.15.

This Court then turned to determining the "lesser amount" that would warrant a reduction of the treaty share of the harvestable anadromous runs. It credited

the federal district court's basic apportionment formula of "starting with a 50–50 division and adjusting slightly downward on the Indians' side when it became clear that they did not need a full 50%." 443 U.S. at 685. The Court stressed "the 50% figure imposes a maximum but not a minimum allocation." *Id.* at 686. "[T]he central principle here must be that Indian treaty rights to a natural resource that once was thoroughly and exclusively exploited by the Indians secures so much as, but no more than, is necessary to provide the Indians with a livelihood – that is to say, a moderate living." *Id.* The Court criticized the dissent on this point, noting that "[b]ecause the 50% figure is only a ceiling, it is not correct to characterize our holding 'as guaranteeing the Indians a specified percentage' of the fish." *Id.* at n.27. It gave an example of when "changing circumstances" could warrant a downward adjustment – a reduction in tribal membership to a level that would make a "45% or 50% allocation an entire run that passes through its customary fishing grounds . . . manifestly inappropriate because the livelihood of the tribe under those circumstances could not reasonably require an allotment of a large number of fish." *Id.* at 687.

Here, the nine-judge dissent from the Ninth Circuit's denial of en banc rehearing rightly reasoned that "the panel opinion turns *Fishing Vessel* on its head" by "impos[ing] an affirmative duty upon the State to provide a certain quantity of fish, which reads out the 50% ceiling entirely." Pet.App. 24a. This is so because the 50% limit accommodates the modern-era reality that

population increases and related economic development have caused, and likely will continue to cause, salmon populations insufficient to support a "moderate living" for treaty fishers, thereby necessitating an equal division of the diminished populations between non-treaty fishers and them. Implicit in the 50% ceiling is the absence of a treaty right to a specific *supply* of fish. Two panel-opinion members retorted that "there is nothing in the [*Fishing Vessel*] opinion that authorizes the State to diminish or eliminate the supply of salmon available for harvest." Pet.App. 10a. But that response misstated the dispositive issue: Whether the fishing clause, as definitively construed in *Fishing Vessel*, requires Washington to carry out its governmental functions so as not to adversely affect the supply of salmon. It plainly did not for the very reason that the rehearing dissent gave; i.e., the clause reserves to treaty fishers only an equitable share of the fishery otherwise available to all fishers in light of current day conditions, not a particular supply of fish.

The rehearing denial concurrence attempted to limit the potential breadth of the equitable servitude by disclaiming "that the Tribes are entitled to enough salmon to provide a moderate living, irrespective of the circumstances," or any intent to "hold that the promise is valid against all human-caused diminutions, or even against all State-caused diminutions." *Id.* Tellingly, though, the concurrence failed to articulate any standard upon which to distinguish those "diminutions" from Washington's culvert system. The panel opinion was equally unhelpful. *See* Pet.App. 95a ("The

'measure of the State's obligation' . . . depends 'on all the facts presented' in the 'particular dispute' now before us."). One can only conclude that the true measure is the length of the Chancellor's foot. *See, e.g.*, *Grupo Mexicano de Desarrollo, S.A. v. Alliance Bond Fund, Inc.*, 527 U.S. 308, 332-33 (1999).

The district court's labored analysis reflects the ipse dixit quality of the Ninth Circuit's approach. The trial court reasoned that "[t]he State's duty to maintain, repair or replace culverts which block passage of anadromous fish [did] not arise from a broad environmental servitude against which the Ninth Circuit Court of Appeals cautioned" in *United States v. Washington*, 694 F.2d 1374, 1381 (9th Cir. 1982), *vacated on reh'g*, 759 F.2d 1353 (9th Cir. 1985) (en banc), because "it is a narrow and specific treaty-based duty that attaches when the State elects to block rather than bridge a salmon-bearing stream with a roadbed." Pet.App. 178a. To be sure, the injunction pertains only to stream culverts, but the district court's explanation did not answer the real question of why stream culverts differ from other governmental (or non-governmental) activities that may negatively affect salmonid populations. For example, dams and related power-generating facilities exist throughout the Columbia River Basin and, according to federal government estimates, account for more than 40% of this Nation's total hydroelectric generation. U.S. Energy Info. Admin., Today in Energy (June 27, 2014), *available at* https://www.eia.gov/todayinenergy/detail.php?id=16891 (last visited Jan. 31, 2018). These facilities have

contributed significantly to the decrease in salmon and steelhead runs since pre-treaty times and to the listing of 13 salmonid evolutionarily significant units as threatened or endangered under the Endangered Species Act, 16 U.S.C. §§ 1531-1544. *See, e.g.*, *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 184 F. Supp. 3d 861, 869-70 (D. Or. 2016). So, too, during the 90-year period between 1920 and 2010, the State of Washington's population grew from approximately 1.2 million to 6.7 million – or over 550% – with attendant infrastructure development and habitat loss. Wash. Office of Fin. Mgmt., State of Wash. 2017 Population Trends at 7 (Table 1), *available at* https://www.ofm.wa.gov/sites/default/files/public/dataresearch/pop/april1/ofm_april1_poptrends.pdf (last visited Jan. 31, 2018). Nothing in the lower courts' lengthy decisions suggests how to separate the wheat from the chaff.

C. The failure of the Ninth Circuit and the district court to offer a reasoned, general standard contrasts sharply with the analysis in *Nez Perce Tribe v. Idaho Power Co.*, 847 F. Supp. 791 (D. Idaho 1994). There, a Stevens treaty tribe sought damages against a power company for construction and maintenance of dams that diminished anadromous fish runs from their 1855 levels. The court rejected the proposition that "Indian tribes . . . have an absolute right to the preservation of the fish runs in their original 1855 condition, free from all environmental damage caused by the migration of increasing numbers of settlers and the resulting development of the land." *Id.* at 808. Rather, "[t]he Stevens treaties require that any development

authorized by the states which injures the fish runs be non-discriminatory in nature . . . but does not, however, guarantee that subsequent development will not diminish or eventually, and unfortunately, destroy the fish runs." *Id.* at 814.

The non-discriminatory standard applied in *Idaho Power* derives directly from this Court's decisions in the *Puyallup* trilogy and *Fishing Vessel* and supplies the level of analytical certainty essential to accommodating the Stevens treaties' fishing clause with the demographic and land use changes that would and did accompany non-Indian settlement of the Pacific Northwest. It also comports with this Court's construction of that clause in *Fishing Vessel* which fashioned an apportionment of fisheries severely diminished over time precisely because of those changes. A necessary predicate for the apportionment was recognition that the treaties reserved to the tribes not a specific supply of fish but an equitable share of the fish otherwise available for harvest. The fishing clause, in sum, protects tribal fishers from governmental or private conduct that interferes with their opportunity to capture an equitable proportion of extant fish runs. *See Fishing Vessel*, 443 U.S. at 681 (deeming "even more significant" than the access issue in *Winans* the case's "actual disposition" that involved, at least in the Government's briefing, proposed removal of fishing wheels used by non-Indian fishers to capture virtually the entire harvestable run). No evidence here suggests that discrimination against tribal fishing rights tainted the design and operation of Washington's culvert system. The

parties' admitted facts showed precisely the opposite; i.e., the State has long recognized the impact of culverts on anadromous species' migration and taken affirmative action through culvert design improvements to reduce that impact. Pet.App. 144a-156a. The court of appeals itself acknowledged this fact. Pet.App. 95a.

Nor does the reserved water rights doctrine enunciated initially in *Winters v. United States*, 207 U.S. 564 (1908), which the Ninth Circuit relied on for inferring a right to a supply of fish unaffected by subsequent demographic or land use changes, counsel a different standard. Pet.App. 92a-94a. *Winters* turned on the determination that the 1888 statute creating the Fort Belknap Indian Reservation impliedly reserved a water right adequate to effectuate the reservation's agrarian purposes and assigned the statute's enactment date as the priority date for prior appropriation purposes. *See Cappaert v. United States*, 426 U.S. 128, 138 (1976) ("This Court has long held that when the Federal Government withdraws its land from the public domain and reserves it for a federal purpose, the Government, by implication, reserves appurtenant water then unappropriated to the extent needed to accomplish the purpose of the reservation."). Here, in contrast, the question is whether a right to take fish from streams outside of a reservation imposes an affirmative duty upon a non-party to the treaty to restore some unknown number of salmon to the ecosystem. *Fishing Vessel* answers that question "no" because, as discussed above, it construed the fishing clause as reserving to the tribes only an entitlement to

an equitable share of available fish. Indeed, *Winters* and *Fishing Vessel* are entirely consistent in that regard because both addressed the appropriate distribution of an otherwise extant natural resource between Indian and non-Indian uses; i.e., *Winters* did not require Montana to create *more* water, just as *Fishing Vessel* did not require Washington to create more fish.

D. The Ninth Circuit's construction and application of the fishing clause have not only a Stevens treaty-specific impact but also substantially wider significance. The court's reasoning will lead inevitably to one result: claims for injunctive or other relief against States or their officials, state political subdivisions and private parties for any diminishment of anadromous fish runs, or other fish, shellfish, and wildlife harvested by tribal members. Commentary on the Ninth Circuit's decision leaves no doubt about its implications with respect to, inter alia, dams, water diversions increasing stream temperatures, timber harvests, grazing practices and sediment-producing construction projects.[3] Various commentators discussed in

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[3] Michael C. Blumm, *Indian Treaty Fishing Rights and the Right to Habitat Protection and Restoration*, 92 Wash. L. Rev. 1, 30 (2017) ("Diversions that dewater streams can have much the same effects on fish migration as barrier culverts or dams. The dewatering of a tribe's usual and accustomed fishing ground would seem to be no less a treaty right violation as migration blockage by a structure in the stream."); Wesley James Furlong, *Restoring the Skagit River Delta: Habitat Restoration and Farmland Reclamation on Fir Island*, 38 Pub. Land & Resources L. Rev. 103, 132-33 (2017) ("Without interpreting the treaties as implying a *proactive* right to habitat protection, courts have nevertheless interpreted them as implying a *retroactive* right to remedy state

similar fashion the potential reach of the district court's 2007 decision (Pet.App. 249a) that laid the predicate for the 2013 injunction.[4] The expansive scope of the Ninth Circuit's decision thus cannot be denied.

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actions that have degraded habitat necessary for salmon survival to satisfy treaty tribes' moderate living needs. Seen another way, courts have imposed a duty on the State to remedy degraded habitats where tribes can show concrete evidence that the loss of habitat affects their right to take fish.") (footnote omitted); Anthony Moffa, *The Oil Sands of Time: Pipelines and Promises*, 22 Ocean & Coastal L.J. 111, 124-25 (2017) ("the United States, or at least the Ninth Circuit, has thus provided a model for the adjudication of situations where government projects come into conflict with indigenous rights to natural resources").

[4] *See* George William Van Cleve, *Saving the Puget Sound Wild Salmon Fishery*, 2 Seattle J. Envtl. L. 85, 118 (2012) ("Because the tribes could contend that each defendant government has an independent legal duty to observe and enforce tribal fishing rights, each government would, arguably, also have the responsibility to take steps to compensate for either inaction or inadequate action under the ESA by any other government engaged in ESA permit review, or related actions such as the provision of flood insurance, in order to ensure that treaty rights are adequately protected."); Katheryn A. Bilodeau, Comment, *The Elusive Implied Water Right for Fish: Do Off-Reservation Instream Water Rights Exist to Support Indian Treaty Fishing Rights?*, 48 Idaho L. Rev. 515, 545 (2012) ("The holding in *Culverts* added a new dimension to the fishing litigation. With a sufficiently defined scope, treaty fishing language includes a right to protection from environmental degradation. A right to protection from the degradation of water quality in fish passages compels the presumption of water in fish passes. This is essentially an implied instream right."); Michael C. Blumm & Jane G. Steadman, *Indian Treaty Fishing Rights and Habitat Protection: The* Martinez *Decision Supplies a Resounding Judicial Reaffirmation*, Nat. Resources J. 653, 695-96 (2009) ("An 'unreasonable interference' in the context of the Stevens treaties is habitat degradation that results in decreased fish populations, which, in turn,

From a Stevens treaty perspective, this expansion of the fishing clause's scope has immense consequences given the treaties' geographical reach throughout the Pacific Northwest. But the Ninth Circuit's reasoning logically extends beyond the fishing clause to any usufructuary entitlement in those treaties. So, to use the Treaty of Medicine Creek, fishing is only one of several rights reserved under Article III. The entire article provides:

> The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands: Provided, however, That they shall not take shellfish from any beds staked or cultivated by citizens, and that they shall alter all stallions not intended for breeding-horses, and shall keep up and confine the latter.

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prevents tribes from being able to make a moderate living from fishing. [¶] Thus, only activities that restrict tribes' ability to earn a moderate living from fish unreasonably interfere with the tribes' piscary profit.") (footnote omitted); William Fisher, Note, *The Culverts Opinion and the Need for a Broader Property-Based Construct*, 23 J. Envtl. L. & Litig. 491, 511 (2008) ("This case can also be viewed as a stepping stone toward the establishment of either: (1) a broad duty, such as that originally established by the district court in Phase II, or (2) several narrow duties (such as this one) directed at specific activities that harm fish passage and habitat.").

10 Stat. at 1133. Although certain other Stevens treaties do not include the proviso, they contain the remaining rights. Carried to its natural conclusion, the Ninth Circuit's reasoning imposes an environmental servitude that prevents States or their political subdivisions from taking actions that negatively affect hunting, gathering or pasturing privileges on "open and unclaimed lands" or failing to remediate past actions that did.

Beyond the Stevens treaties lies the effect of the Ninth Circuit's decision in other contexts. Recent EPA actions and final rules declining to approve Maine and Washington WQS and imposing federal WQS in their stead are likely harbingers. *See* 81 Fed. Reg. 92,466 (Dec. 19, 2016) (Maine); 81 Fed. Reg. 85,417 (Nov. 28, 2016) (Washington). Maine has a nationally unique tribal-state relationship with four tribes as a result of a 1980 settlement reflected in federal and state statutes (the Maine Indian Settlement Acts). *See id.* at 92,467. For the first time in February 2015, EPA interpreted those acts as implicitly requiring a new CWA tribal sustenance fishing designated use for unspecified Maine waters that Maine itself never adopted. *See id.* at 92,472, 92,478. In subsequent rulemaking, EPA built on this new interpretation as a basis for imposing federal WQS and cited the Ninth Circuit's decision for the proposition that "it would defeat the purposes of the [settlement acts] for the tribes in Maine to be deprived of the ability to safely consume fish from their waters at sustenance levels" (*id.* at 92,479-80):

> [T]he Ninth Circuit Court of Appeals recently determined that the right of tribes in the State of Washington to fish for their subsistence in their "usual and accustomed" places necessarily included the right to an adequate supply of fish, despite the absence of any explicit language in the applicable treaties to that effect. Specifically, the Court held that "the Tribes' right of access to their usual and accustomed fishing places would be worthless without harvestable fish."

Id. at 92,479 (footnote omitted). As to both Maine and Washington, EPA found the decision below, along with other cases, consistent with a Department of the Interior legal opinion "conclud[ing] that 'fundamental, longstanding tenets of federal Indian law support the interpretation of tribal fishing rights to include the right to sufficient water quality to effectuate the fishing right.'" *Id.* at 85,423 n.39, 92,479.

Proper application of *Fishing Vessel*, in sum, will remove the Ninth Circuit's decision as justification for this misunderstanding of Indian law generally and the Indian canons specifically. Treaties may reserve and statutes may create certain rights. The canons serve only to determine those rights, not to establish them where the parties or Congress has not. The Ninth Circuit in ignoring *Fishing Vessel* did the latter.

II. *SHERRILL* SHOULD BE EXTENDED TO THE EQUITABLE DEFENSES RAISED BY WASHINGTON TO THE UNITED STATES' CLAIM

"Laches is 'a defense developed by courts of equity to protect defendants against unreasonable, prejudicial delay in commencing suit.'" *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 960 (2017). "A waiver is ordinarily an intentional relinquishment or abandonment of a known right or privilege." *Johnson v. Zerbst*, 304 U.S. 458, 460 (1938). "The vital principle [for equitable estoppel] is that he who by his language or conduct leads another to do what he would not otherwise have done, shall not subject such person to loss or injury by disappointing the expectations upon which he acted." *Dickerson v. Colgrove*, 100 U.S. 578, 560 (1879); *see also Glus v. Brooklyn E. Dist. Terminal*, 359 U.S. 231, 233-34 (1958). These equitable defenses have clear relevance here given the United States' pre-2001 conduct.

To start, WSDOT adhered to hydraulic culvert designs published by the FHWA as a condition of federal funding until Washington itself developed design methods that improved upon the federal model. Federal agencies subsequently adopted the Washington design improvements for their own projects. Pet.App. 137a-139a. WSDOT has an ongoing program to remediate its salmon barrier culverts for which it has received excellence awards from the FHWA. Pet.App. 144a-155a; J.A. 224a, 390a. Washington also has received CWA permits under 33 C.F.R. § 323 with respect to its

culvert construction activities under which impacts to endangered or other fish must be considered. J.A. 78a-80a; *see* 40 C.F.R. §§ 230.30, 230.31. There is, as well, no dispute that Washington's road building activities, including culvert construction, have been ongoing for many decades. Pet.App. 139a-144a. Needless to say, tribal members and other state residents directly benefitted, and continue to benefit, from the state road infrastructure. The United States and the tribes could have challenged the State's actions as they were being undertaken or to bring proposed ameliorative measures to the state agencies' attention through government-to-government collaboration or asserted claims under statutes such as the CWA or the ESA.

The trial record thus contained substantial evidence that the United States partnered with Washington over many decades in culvert construction and maintenance. The Ninth Circuit nonetheless deemed the State's equitable defenses based, inter alia, on that partnership precluded as a matter of law "[b]ecause the treaty rights belong to the Tribes rather than the United States" and thus outside the federal government's prerogative to waive, relying on *Cramer v. United States*, 261 U.S. 219 (1923). Pet.App. 98a. It deemed this Court's decision in *Sherrill* inapposite because the present dispute did not involve a tribal claim to sovereignty over abandoned lands, a situation where the tribes themselves had authorized the state culvert program, or a revival of "disputes that have long been left dormant." Pet.App. 99a.

The Second Circuit, however, has reached the opposite conclusion. As it stated in *Cayuga Indian Nation v. Pataki*, 413 F.3d 266 (9th Cir. 2005), "[w]e recognize that the United States has traditionally not been subject to the defense of laches" but immediately added that "this does not appear to be a *per se* rule." *Id.* at 278. The *Cayuga* court then endorsed a set of factors formulated by the Seventh Circuit in *United States v. Administrative Enterprises, Inc.*, 46 F.3d 670 (7th Cir. 1995), governing application of laches to the United States: "first, 'that only the most egregious instances of laches can be used to abate a government suit'; second, 'to confine the doctrine to suits against the government in which . . . there is no statute of limitations'; and third, 'to draw a line between government suits in which the government is seeking to enforce either on its own behalf or that of private parties what are in the nature of private rights, and government suits to enforce sovereign rights, and to allow laches as a defense in the former class of cases but not the latter.'" 413 F.3d at 279; *see also Oneida Indian Nation v. County of Oneida*, 617 F.3d 114, 129 (2d Cir. 2010) ("*Cayuga* expressly concluded that the United States is subject to such defenses under circumstances like those presented here (i.e., a lengthy delay in asserting the relevant cause of action, the absence of an applicable statute of limitations for the great majority of this delay, and an intervention to vindicate the interests of an Indian nation)."). Each factor exists here. The Ninth Circuit panel did not even acknowledge those decisions' contrary holding – as the opinion dissenting from en banc rehearing discussed. Pet.App. 34a-35a.

This Court has declined thus far to adopt "'a flat rule that estoppel may not in any circumstances run against the Government.'" *Office of Personnel Mgmt. v. Richmond*, 496 U.S. 414, 423 (1990). In *Richmond*, it chose to "leave for another day whether an estoppel claim could ever succeed against the Government" because "a narrower ground for decision" was adequate to resolve the case: Equitable estoppel can never serve as a basis to recover a "payment of money from the Public Treasury contrary to a statutory appropriation." *Id.* at 423-24. The present dispute, however, does not involve an affirmative attempt to gain some economic or other benefit from the United States or even Stevens treaties tribes. It arises from the United States' use of the Supremacy Clause to vindicate third-party rights against a sovereign State for conduct previously authorized by the federal government. Although the United States does not seek to restore tribal "sovereignty over land within the boundaries of an abandoned reservation[,]" it does raise "claims that have long been left dormant." Pet.App. 99a. Indeed, the facts here are more egregious than those in *Sherrill* because the government predicates its Supremacy Clause claim on culvert construction that it not only encouraged but affirmatively approved.

Nor does the Ninth Circuit's observation that this controversy differs from *Sherrill* because "Washington and the Tribes have been in a more or less continuous state of conflict over treaty-based rights for over one hundred years" pass the historical plausibility test. "From the very beginning of their dispossession in the

nineteenth century, the Oneidas unsuccessfully sought federal intervention to recover lands illegally taken by the State of New York." John Tahsuda, *The Oneida Land Claim: Yesterday and Today*, 46 Buff. L. Rev. 1001, 1004 (1998). The Oneida Nation filed its action seeking recovery of 250,000 acres of treaty-reserved land in 1970, the same year as this case began and over 30 years before the request for determination resulting in the present appeal. *See generally* Dale T. White, *Indian Country in the Northeast*, 44 Tulsa L. Rev. 365, 375 & n.69 (2008). Fifty years earlier, the United States on behalf of certain Oneida Nation members had filed successful ejectment action to recover 32 acres of improperly conveyed land. *United States v. Boylan*, 256 F. 468 (N.D.N.Y. 1919), *aff'd*, 265 F. 165 (2d Cir. 1920). The panel opinion's "continuous state of conflict" comment simply failed to take account of the contentious relationship between the Oneidas and New York since the late Eighteenth Century.

Lastly, the Ninth Circuit's reliance on *Cramer* as establishing a per se rule against the availability of equitable estoppel against the federal government where it asserts a claim on a tribe's or tribal member's behalf in its trustee role reads too much into too little. Pet.App. at 97a. The United States there sought cancellation of a 1904 patent issued to a railroad insofar as it included land occupied by several Indians since 1859. This Court held that "settled government policy" supported the Indians' right of occupancy that "was definite and substantial in character and open to observation when the railroad grant was made." *Id.* at

229-30. It rejected the railroad's defense that "government [was] estopped from maintaining this suit by reason of any act or declaration of its officers or agents" in issuing the patents, reasoning that "since these Indians with the implied consent of the government had acquired such rights of occupancy as entitled them to retain possession as against the defendants, no officer or agent of the government had authority to deal with the land upon any other theory." *Id.* at 234. Washington's defenses, however, arise out of a relationship in which the United States worked cooperatively over decades to foster state culvert construction activity – with the tribes' knowledge – because the culverts and related road system "were necessary aids to the development of the public lands" – i.e., they "facilitated communication between settlements already made, and encouraged the making of new ones, increased the demand for additional lands, and enhanced their value." *Cent. Pac. Ry. v. Alameda County*, 284 U.S. 463, 473 (1932). The government, moreover, engaged in precisely the same activity on federal lands, employing (like Washington) FHWA design standards before adopting the State's improved standards. This case thus differs radically from the *Cramer* situation in which agency employees acted in violation of longstanding administrative circulars and land decisions by issuing leases that effectively dispossessed Indians from their openly enclosed, improved property. *See Cramer v. United States*, 276 F. 78, 80 (9th Cir. 1921) (discussing Interior Department policies and rulings), *rev'd on other grounds*, 261 U.S. 219 (1923).

To paraphrase *Sherrill*, "[w]hen a party belatedly asserts a [treaty] right to [control sovereign activity], longstanding observances and settled expectations are prime considerations." 544 U.S. at 218. The Ninth Circuit erred in holding that *Cramer* stands as a categorical bar to Washington's waiver and estoppel defenses. If this Court resolves the first question presented against Washington, it therefore should remand for determination of those defenses with reference to a full factual record.

III. THE MANDATORY INJUNCTIVE RELIEF AWARDED BY THE DISTRICT COURT WAS NOT NARROWLY TAILORED TO REMEDYING THE PERCEIVED HARM, OFFENDED SETTLED FEDERALISM LIMITATIONS, AND FAILED TO GIVE ANY CONSIDERATION TO THE EQUITABLE DEFENSES RAISED BY WASHINGTON

The district court's March 2013 permanent injunction requires Washington, inter alia, to

- prepare within six months a list of all culverts under state-owned roads that are salmon barriers;
- assess and identify, on an ongoing basis, culverts under state-owned roads that become salmon barriers after the injunction's issuance;

- construct new culverts on case-area "salmon waters" in compliance with the injunction's standards;
- require by October 31, 2016 three of the four state agencies managing culverts to provide fish passage in compliance with the injunction's standards;
- require WSDOT within 17 years to provide fish passage in compliance with the injunction's standards on all culverts "if the barrier culvert has 200 lineal meters or more of salmon habitat upstream in the first natural passage barrier";
- require WSDOT to provide fish passage in compliance with the injunction's standards on culverts "having less than 200 lineal meters of upstream salmon habitat at the end of the culvert's useful life, or sooner as part of a highway project, to the extent required by other applicable law";
- provide fish passage when a corrected culvert fails to provide such passage or a new culvert is added to the list of salmon barrier culverts; and
- provide tribes with sufficient notice of the salmon barrier culvert inventory, newly identified barrier culverts and correction activities "to monitor and provide effective recommendations for compliance with the [injunction's] requirements."

Pet.App. 236a-240a. The injunction, as the preceding summary indicates, specifies not only what must be done but also dictates the culvert remediation standards themselves.[5] The district court, finally, retains "continuing jurisdiction over this subproceeding for a sufficient period to assure that the Defendants comply with the terms of this injunction." Pet.App. 240a-241a.

The injunction fits seamlessly within not only the 2009 Ninth Circuit panel's reference to Jarndyce and Jarndyce but also its concern over federal district courts taking on the role of an administrative agency.

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[5] Paragraph 10 of the injunction thus provides:

> In carrying out their duties under this injunction, the Defendants shall design and build fish passage at each barrier culvert on the List in order to pass all species of salmon at all life stages at all flows where the fish would naturally seek passage. In order of preference, fish passage shall be achieved by (a) avoiding the necessity for the roadway to cross the stream, (b) use of a full span bridge, (c) use of the "stream simulation" methodology described in Design of Road Culverts for Fish Passage (WDFW, 2003) or Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings (U.S. Forest Service, May 2008), which the parties to this proceeding have agreed represents best science currently available for designing culverts that provide fish passage and allow fluvial processes. Nothing in this injunction shall prevent the Defendants from developing and using designs other than bridges or stream simulation in the future if the Defendants can demonstrate that those future designs provide equivalent or better fish passage and fisheries habitat benefits than the designs required in this injunction.

Pet.App. 238a-239a.

It subjects Washington's sovereign management of its highway culverts to tribal oversight and federal judicial control for potentially decades. The district court's coercive relief exacts a heavy toll from both state sovereignty and public coffers. The latter toll is staggering. The district court's findings on the remediation costs for WSDOT projects, while spare, suggest that they could range between $658,639 (for projects completed before the 2009 trial) and an estimated $1,827,168 (state expert estimate identified in the 2013 findings). Pet.App. 170a. As of March 2009, over 800 culverts under state roads had more than 200 meters of anadromous salmon habitat upstream. Pet.App. 142a. Washington can expect, therefore, to spend in excess of one billion dollars under even a conservative assumption that actual per-culvert cost falls within the average of those amounts ($1,242,903), not considering inflation.

Washington's brief, like the opinion dissenting from en banc rehearing, summarizes the injunction's palpable overbreadth. Br. of Petitioner at 53-54, 56-58; Pet.App. 36a-41a. Amici States believe that several points bear particular emphasis. *First*, the district court's findings effectively attribute to state culverts salmon population impacts even though (1) those pculverts constitute a small percentage of all salmon barrier culverts in the case area and (2) no evidence exists as to the ultimate increase in returning harvestable fish that the State's billion-dollar plus expenditure will generate. Multiple factors – *e.g.*, ocean conditions, non-case area harvest and non-culvert-related habitat constraints – affect

available harvest. As the rehearing dissent observed, "[g]iven the significant cost of replacing barriers, . . . being forced to replace even a single barrier that will have *no tangible impact* on the salmon population is an unjustified burden." Pet.App. 39a. Obviously enough, respondents focused on state culverts because they perceived them in gross as easy targets. But the federal court's extraordinary power to issue coercive relief against States and their officials must be tailored narrowly to matching every element of the relief to an identifiable and proportionate benefit. The district court simply did not engage in the requisite cost-benefit analysis on a culvert-by-culvert basis. *See Milliken v. Bradley*, 433 U.S. 267, 281-82 (1977) ("The well-settled principle that the nature and scope of the remedy are to be determined by the violation means simply that federal-court decrees must directly address and relate to the constitutional violation itself. Because of this inherent limitation upon federal judicial authority, federal-court decrees exceed appropriate limits if they are aimed at eliminating a condition that does not violate the Constitution or does not flow from such a violation, . . . or if they are imposed upon governmental units that were neither involved in nor affected by the constitutional violation[.]") (citation omitted).

Second, Washington has not ignored, and is not ignoring, improving culvert fish passage. In 1997, the state legislature established the Fish Passage Task Force, and since then "the state agencies have identified fish passage barriers under their roads and have

accelerated the rate of correction of such barriers." Pet.App. 147a (admitted facts ¶ 3.89). Two of the state agencies had "a goal of correcting their barrier culverts by July 2016[,]" with "the level of funding" as "[t]he primary factor determining the rate at which the State can correct fish barrier culverts." Pet.App. 148a (admitted facts ¶¶ 3.90 and 3.92). The district court's failure to defer to the state process does not square with this Court's admonition in the seminal *Rizzo v. Goode*, 423 U.S. 362 (1976):

> When a plaintiff seeks to enjoin the activity of a government agency, even within a unitary court system, his case must contend with "the well-established rule that the Government has traditionally been granted the widest latitude in the 'dispatch of its own internal affairs[.]' . . . The District Court's injunctive order here, significantly revising the internal procedures of the Philadelphia police department, was indisputably a sharp limitation on the department's "latitude in the 'dispatch of its own internal affairs.'" [¶] When the frame of reference moves from a unitary court system, governed by the principles just stated, to a system of federal courts representing the Nation, subsisting side by side with 50 state judicial, legislative, and executive branches, appropriate consideration must be given to principles of federalism in determining the availability and scope of equitable relief.

Id. at 378-79 (citations omitted); *see Lewis v. Casey*, 518 U.S. 343, 385-86 (1996) (Thomas, J., concurring) ("Broad remedial decrees strip state administrators of

their authority to set long-term goals for the institutions they manage and of the flexibility necessary to make reasonable judgments on short notice under difficult circumstances. . . . At the state level, such decrees override the 'State's discretionary authority over its own program and budgets and forc[e] state officials to reallocate state resources and funds to the [district court's] plan at the expense of other citizens, other government programs, and other institutions not represented in court.'") (citations omitted). The highly prescriptive and extraordinarily costly mandatory injunction here embodies precisely the evils counseled against by the Court in *Rizzo* and Justice Thomas in *Casey*. It largely strips Washington of the sovereign power not only to balance competing fiscal demands but also to determine how best to carry out its culvert remediation process without officious oversight by the federal judiciary. *See supra* 31 n.5.

Third, the equitable considerations related to application of *Sherrill* carry significant weight even if not a complete bar to the United States' claim. *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 134 S. Ct. 1962 (2014), illustrates the point. There, this Court declined to recognize the availability of a laches as a complete defense to a Copyright Act claim for damages brought within the three-year limitation period in 17 U.S.C. § 507(b). Reversing the Ninth Circuit, it held:

> Laches . . . cannot be invoked to preclude adjudication of a claim for damages brought within the three-year window. As to equitable relief, in extraordinary circumstances, laches

> may bar at the very threshold the particular relief requested by the plaintiff. And a plaintiff's delay can always be brought to bear at the remedial stage, in determining appropriate injunctive relief, and in assessing the "profits of the infringer . . . attributable to the infringement."

134 S. Ct. at 1967. It added later that "[i]n extraordinary circumstances, however, the consequences of a delay in commencing suit may be of sufficient magnitude to warrant, at the very outset of the litigation, curtailment of the relief equitably awardable." *Id.* at 1977; *see also id.* at 1978 ("Should Petrella ultimately prevail on the merits, the District Court, in determining appropriate injunctive relief and assessing profits, may take account of her delay in commencing suit."). Neither the district court in fashioning the sweeping injunction nor the Ninth Circuit in approving it gave any thought, much less weight, to the federal government's involvement in the state culvert system's development or the unexplained delay in asserting a treaty violation. Instead, conversely to the *Petrella* Ninth Circuit panel, the lower courts simply ignored the equitable considerations raised by Washington once they found waiver and estoppel unavailable as complete defenses.

The district court injunction, in sum, should be vacated even if this Court resolves the first two questions presented against Washington. Its overbreadth trenches deeply upon settled federalism-based limits on such relief, and the lower courts failed to consider the appropriate scope of relief in light of the equitable

factors identified with respect to Washington's waiver and estoppel defenses.

CONCLUSION

The Court of Appeals' judgment should be reversed.

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STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.,

Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit

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INTEREST OF AMICI CURIAE

Amici curiae, listed in the Appendix, are law professors who teach and write in the areas of property, natural resources, and federal Indian law. They file this brief to explain the development of English common law rules preventing persons from erecting artificial obstructions in navigable and non-navigable waterways. Such obstructions were actionable if they precluded fish from swimming upstream, thereby disrupting the rights held by the general public and/or private property holders to harvest those fish.

This common law prohibition on obstruction of waterways was incorporated, with only slight modifications, by federal, state and local governments throughout the United States. Indeed, it formed the basis of court decisions and legislation in the eighteenth and nineteenth centuries that conditioned the erection of mills, dams, and other artificial structures on assurance of reasonable fish passage. The amici curiae have an interest in ensuring that this information, which is entirely absent from the briefs submitted by the Petitioner and its amici curiae, is available to the Court.[1]

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[1] No counsel for any party authored this brief in whole or in part, and no person other than amici or their counsel made a monetary contribution intended to fund the preparation or submission of this brief. All parties have consented to the filing of this amicus brief.

INTRODUCTION AND SUMMARY OF ARGUMENT

In the 1850s, the United States entered into a series of treaties with Indian tribes in the Pacific Northwest. In these treaties, the tribes agreed to cede large swaths of land to the United States. *See, e.g.*, Treaty of Point-No-Point, art. I, 12 Stat. 933, 934 (1855). In exchange, however, they demanded assurances that they could continue to take fish within the territory they were ceding. Fish "were not much less necessary to the existence of the Indians than the atmosphere they breathed." *United States v. Winans*, 198 U.S. 371, 381 (1905). They were important not only for subsistence and commercial purposes; fish were an integral part of tribal culture and religion. *United States v. Washington*, 384 F. Supp. 312, 350 (W.D. Wash. 1974) (noting that "one common cultural characteristic among all of these Indians was the almost universal and generally paramount dependence on . . . anadromous fish," which were "vital to the Indian diet, played an important role in their religious life, and constituted a major element of their trade and economy").

The federal government acceded to this Tribal demand. Governor Isaac Stevens, the lead negotiator for the United States, stood before tribal representatives, holding the treaty, and promised them that "[t]his paper secures your fish." *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 667 n.11 (1979) (hereinafter *Fishing Vessel*). As signed and ratified, these treaties explicitly stated that "[t]he right of taking fish, at all usual and accustomed grounds and stations, is further

secured to said Indians in common with all citizens of the Territory." *See, e.g.*, Treaty of Point-No-Point, art. IV, 12 Stat. 933, 934 (1855).[2]

But for these treaties, the State of Washington would not exist. Yet the Tribes are no longer secured in their fisheries. The State has built numerous roads that traverse waterways within the ceded territory. Underneath those roads it has constructed culverts that allow the water to continue to flow. The State readily admits that many of these culverts completely obstruct the passage of fish upstream. Pet. Br. at 19. In fact, within the ceded territory, there are more than 800 culverts that block fish passage. *Id.* This is particularly problematic for anadromous fish such as salmon, because of their life cycle. They hatch in fresh water rivers, migrate to the ocean where they remain for most of their life, and return to their fresh-water place of origin to spawn. *Fishing Vessel*, 443 U.S. at 662. Blocking their passage prevents them from entering the ocean as juveniles and from reaching their spawning grounds as adults.

Lower federal courts concluded that these culverts violated the Tribes' treaty rights and must be removed. The State argues, however, that these decisions have created an "extraordinarily broad new treaty right" that "has no basis in . . . history or precedent" and is

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[2] Since federal negotiators used the Chinook jargon, a trade language limited to only 300 words, it would have been hard to precisely translate this provision. *Fishing Vessel*, 443 U.S. at 667, n.10. Instead, as this Court has previously noted, the Indians "were invited by the white negotiators to rely on and in fact did rely heavily on the good faith of the United States to protect [their fishing] right." *Id.* at 667.

"unworkable." Pet. Br. at 27, 35. It claims that both the United States and the Tribes "assumed that guaranteeing access to usual and accustomed fishing places would suffice to guarantee the Tribes' access to salmon," and that this assumption was "mistaken;" in other words, since the "impact of development on salmon" is not something that the parties specifically contemplated, no such right exists. *Id.* at 35. The State also asserts that it should have an equitable defense, because the federal government granted permits enabling the construction of the culverts in the first place. *Id.* at 29.

The State is supported by amici curiae Association of Washington Business et. al. ("AWB"), which argues in its brief that the Tribes' treaty right only provided Tribal members with the opportunity to fish, because "[a]t common law, fishing rights were understood to be interests in real property tied to particular locations, not rights in the fish themselves." AWB Br. at 5, 9. Citing William Blackstone's *Commentaries on the Laws of England* (1766) and James Kent's *Commentaries on American Law* (1828), AWB claims that fish are wild animals, and a property interest in them could only be acquired by possession. *Id* at 5, 10. The treaty right retained by the Tribe was thus supposedly nothing more than the common law right of the public to fish in navigable waterways, a right that could be regulated by the State pursuant to the public trust doctrine. *Id.* at 10. Reviving the oft-argued and routinely rejected "equal opportunity" argument,[3] AWB concludes that

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[3] Throughout the twentieth century, the State argued that the treaty right granted the Tribes' nothing more than the rights State citizens enjoy in the fishery. This Court has repeatedly rejected

interpreting the treaty right in this manner would not render it meaningless, because it guaranteed the Tribes the right to fish off-reservation in the same manner as all other citizens of the territory. *Id.* at 11.

The arguments advanced by the State and its amici curiae are rather remarkable because they would actually guarantee tribes *fewer* rights than even private individuals had at treaty times. The prohibition on blocking fish passage was well-established in Anglo common law. No less a document than the Magna Carta embodied the barons' demand that "[a]ll fish-weirs shall be removed from the Thames, the Medway, and throughout the whole of England, except on the sea coast." Magna Carta ¶ 33 (1215). By the 1850s, when Governor Stevens was negotiating with the Pacific Northwest tribes, English law was clear that it was illegal "to obstruct the passage of fish into the upper fishery," particularly if it was prejudicial to those with downstream fishery rights. *See, e.g.*, Humphrey W. Woolrych, *A Treatise of the Law of Waters* 170-71 (1853) ("the state or condition of a fishery low down a stream, cannot be so altered as

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this argument. In doing so, it has prohibited the State from licensing fish wheels and implied an easement across all land – both public and private – as necessary to ensure that Indians are not excluded from their fishery. *Winans*, 198 U.S. at 380-81. It has prohibited the State from charging tribal members a license fee when exercising their treaty rights. *Tulee v. Washington*, 315 U.S. 681, 685 (1942). It has precluded enforcement of discriminatory State regulations that favor sports fisherman over tribal subsistence fisherman. *Dep't of Game of Washington v. Puyallup Tribe*, 414 U.S. 44, 48 (1973). And it has held that the treaty right guarantees Indian tribes up to one-half of the harvestable fish at their usual and accustomed places. *Fishing Vessel*, 433 U.S. at 684-87.

to obstruct the passage of fish into the upper fishery, especially if it be done in such a manner as may be prejudicial to the fair exercise of the right of catching fish in the lower fishery"); *see also Weld v. Hornby*, 103 Eng. Rep. 75, 7 East 196 (K.B. 1806) (declaring stone weir a public nuisance because it blocked the passage of fish upstream); *Parker v. People*, 111 Ill. 581, 591-92 (1884) (noting that more than 30 acts of parliament forbade obstructions that prevented fish from swimming upstream).

The U.S. states adopted the prohibition on obstructing fish passage from the very beginning. *E.g.*, Joseph K. Angell, *Treatise on the Law of Watercourses* 82-83 (5th ed. 1854) ("The right of several fishery is clearly limited to the right of taking fish, and does not carry with it the right to hinder the passing of them above, and of preventing the suprariparian proprietors from enjoying a similar privilege"). They did so both through common law nuisance doctrines and statutory prohibitions. *E.g., Boatright v. Bookman*, 1 Rice 447 (S.C. Ct. App. 1839) (noting that obstructions to the passage of fish may constitute a public or private nuisance, and describing an 1827 Act passed to prevent such on specific rivers).

Both legislation and common law also authorized exactly the remedy ordered by the courts below: that the offending obstacle be modified or removed. Legislation established fish committees authorized to inspect obstructions and ensure that fish passage was maintained. Such committees were empowered to order that remedial actions be taken, and if necessary, enter private property and tear down the offending structure. *See, e.g., Holyoke Co. v. Lyman*, 82 U.S. 500,

509 (1872) (describing 1866 Massachusetts statute authorizing state fisheries commissioners to examine dams, determine the fishways that should be constructed, and, if the dam owner refused to agree to the remediation plan, authorize the commissioners to make physical modifications and charge the cost to the owner).

Thus, the supposedly "extraordinary" action of the lower federal courts in demanding that the State remove its obstructions from waterways within the ceded territory, is no different than the result that would lie at common law. *Accord* Resp. Br. at 34-35. Further, while the State claims that equitable relief is not proper because the federal government approved its culverts when they were constructed, this same argument routinely failed at common law. Courts repeatedly rejected defenses by mill owners that they had been authorized to construct their obstruction by a royal grant (in England) or a legislative act (in the United States). *See, e.g.*, *Stoughton v. Baker*, 4 Mass. 522 (1808) (holding authorization to create a dam did not preclude the more recently created fishery committee from ordering modifications to provide for fish passage). Although the criteria for determining whether a particular weir, mill or dam violated the prohibition on obstructions varied from jurisdiction to jurisdiction, none of the tests appear to have been "unworkable," nor did they produce a floodgate of litigation. *See, e.g.*, *Summers v. People*, 29 Ill. App. 170, 172 (Ill. Ct. App. 1888) (precluding any obstruction that "substantially and materially interferes" with fish passage).

The Tribes have a federally protected treaty right, not one based on the vagaries of State common law. *Winans*, 198 U.S. at 380. But surely the treaty right of taking fish contains at least the protections against direct obstructions of waterways that the common law rights in a fishery would include. When the treaty was negotiated and signed, those rights prevented blocking fish passage as the State's culverts do here.

ARGUMENT

I. THE COMMON LAW PROTECTED FISHERIES FROM OBSTRUCTIONS THAT IMPEDED FISH PASSAGE

A. Fishery Rights Like Those Guaranteed by the Tribes' Treaties Were Well-Established at Common Law

The common law recognized both public and private fisheries. Joseph Chitty, *A Treatise on the Game Laws and on Fisheries* 239 (2d ed. 1826). Public fisheries existed in the ocean and on navigable waters, the latter of which were defined to include all waterways that were "arms of the sea" because they were subject to the ebb and flow of the tide. Chitty, *supra*, at 239, 269, 276. Private fisheries existed in non-navigable rivers, lakes and streams.

In the ocean and other navigable waters, while the king was entitled to take certain species denominated "royal fish" (e.g., whales and sturgeon), the privilege of fishing for other species belonged to all British subjects in common. Woolrych, *supra*, at 92, 98-99. *See also* Henry Schultes, *An Essay on Aquatic Rights* 4-5, 10, 13, 15, 17 (1831) (discussing the development of these principles from Roman law to the early English

common law scholars). In waters that were not navigable, however, the presumption was that the public had no right to fish there. Instead, the owners of the riparian lands owned the fishery. Chitty, *supra*, at 276-77. If one person owned both sides of a non-navigable river, he would acquire the exclusive right of fishing in the waters between. Otherwise, a riparian owner gained the right to fish to the middle of the waterway. *Id.* at 276-77; Archibald Brown, *Scriven on Copyholds* 243 (6th ed. 1882); Woolrych, *supra*, at 30, 124.

These default rules could be modified by obtaining rights in a fishery through royal grant (i.e., franchise), private grant, custom, or prescription. Woolrych, *supra*, at 30, 91, 92, 139, 141. The extent to which these rules could be used to modify the rights in public fisheries, however, was hotly debated. Scholars disagreed about whether the public's rights in navigable waters could be abrogated through royal grant. *See* Schultes, *supra*, at 4-18, 68-69, 80 (arguing that the king could only grant an exclusive franchise in navigable waters for royal fish). And while some scholars claimed that a person could obtain an exclusive private fishery in navigable waters through prescription after 20 years, others argued that public fisheries could not be appropriated by individuals in this manner. *Compare see* Henry Roscoe, 1 *A Treatise on the Law of Actions Relating to Real Property* 372 (1825), *with Scriven on Copyholds*, *supra*, at 242. *See also* Schultes, *supra*, at 4, 10 (noting that under Roman law, public rights were "incapable of individual exclusive appropriation").

Because grants, custom and prescription could modify the rights to private fisheries, and potentially public fisheries (subject to the above limitations), courts and scholars referred to the resulting fisheries as "territorial fisheries," "several fisheries," "free fisheries," "common fisheries," and "commons of piscary." Woolrych, *supra*, at 30, 123-24. Unfortunately, there was never complete agreement on the definition of each of these terms, which overlapped. Chitty, *supra*, at 280-81 (noting that "[f]rom the earliest cases that can be found upon this subject, the distinctions between these various fisheries seem to have been much disputed"); William Blackstone 2(2) *Commentaries on the Laws of England* 40 (claiming that there were three different types of fisheries, and "the rights and distinctions [of these fisheries is] . . . very much confounded in our law-books"); Schultes, *supra*, at 32-33 (claiming that there were four different types of fisheries and "a considerable contrariety of sentiment has prevailed in regard to their distinct definitions").

Regardless of the nuances, most courts and scholars agreed that a "several fishery" was an exclusive right to take fish within an area.[4] Woolrych, *supra*, at 126,

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[4] Differences arose as to whether the possessor of a several fishery was required to be a riparian landowner. For example, Blackstone believed that a several fishery was the exclusive right of fishing possessed by a riparian landowner, and that a free fishery was the exclusive right of fishing in public waters, pursuant to a royal franchise. Blackstone, *supra*, at 39-40. But Schultes believed that a several fishery was an exclusive right to fish, and that while this right could not exist in navigable waterways, in private waters, it was not limited to riparian landowners. Schultes, *supra*, at 33, 36, 44, 85.

134, 137; Chitty, *supra*, at 281-83, 303. This was in contrast with a "common of piscary," which was a type of profit-a-prendre – a non-exclusive right to take fish in a private waterway, typically as a non-riparian landowner. Blackstone, 2(2), *supra*, at 30 (noting that a "common of piscary is a liberty of fishing in another man's water" and discussing other profits such as the common of turbary (turf), and estover (fallen wood)); John Edward Hall, *A Treatise on the Law Relating to Profits A Prendre and Rights of Common* 307 (1871). *Cf.* George Wingrove Cooke, *A Treatise on the Law of Rights of Commons* 7, 37 (1856) (concluding that a common of piscary could, like other profits, be appurtenant (benefiting and transferring with land) or in gross (benefiting a person)). Definitions of a "free fishery" were more disparate. *Compare* Schultes, *supra*, at 61-62 (concluding that a free fishery was synonymous with a common of fishery; it was a non-exclusive right to fish in navigable and non-navigable waters), *with* Blackstone, *supra*, at 39 (asserting that a free fishery was the exclusive right of fishing in a public river and was also known as a royal franchise).

The rights belonging to the Tribes bear hallmarks of several of these common law fisheries, a fact glossed over by amici curiae AWB in its brief discussion of the common law. AWB Br. at 10-11. For example, as the former owners of riparian land on both sides of non-navigable waterways, the Tribes, under a common law regime, would have originally possessed an exclusive several fishery. In their treaties, the Tribes retained the right to take fish at all of their "usual and accustomed fishing places," but they did so "in common with the citizens of the territory." Therefore, the Tribes' rights bear some resemblance to both a free

fishery and a common of piscary. But neither of these categories fits precisely, because as this Court has previously held, the Tribes did not simply retain the right to compete equally with other fisherman. Their treaties guarantee tribal members the right to take up to one half of the harvestable fish at their traditional fishing locations. *Fishing Vessel*, 433 U.S. at 684-87.

Regardless, the precise categorization of these Tribal rights would not have mattered at common law. Whatever their characterization, the Tribes' rights would have been understood as valuable property interests, entitled to protection from interference. In particular, as discussed in the next section, obstructions that blocked fish passage to any of those fisheries were prohibited.

B. Obstructions to Fish Passage Were Prohibited at Common Law

At common law, obstructions in navigable waterways were considered "purprestures," or public nuisances. This rule was originally developed, in part, because obstructions hindered navigation, and historically, rivers were the equivalent of today's highways. But obstructions were also prohibited if they impeded the passage of fish upstream. Chitty explains the reasoning behind this rule as follows:

> Public fisheries, as a matter of national concern, are of great importance, since they are not only the source of considerable sustenance for the population of the country, but constitute a nursery for our seamen. We therefore find that the common law has, in various instances, particularly protected such fisheries . . .

Chitty, *supra*, at 239. Woolyrch agreed in particularly strong language: "[T]he erection of wears, so as to injure the fish, is a public nuisance, it is itself illegal, and against the rules of the common law; and no length of time will legitimate or sanction the continuance of such an obstruction." Woolrych, *supra*, at 217.

This rule was so strong, that "[n]ot even a legal grant by the Crown can make a nuisance of this kind [obstructing a public waterway] legitimate. The right of the public is paramount." Woolrych, *supra*, at 194. For example, in *Williams v. Wilcox*, 8 Ad. & E. 315 (1838), the plaintiff brought a trespass action against the defendant, who had torn down a weir appurtenant to the plaintiff's fishery. The plaintiff, similar to the Petitioners here, claimed that his weir was legal because the Crown had granted his predecessors in interest the right to erect it generations ago. Additionally, at the time of its original construction, the weir blocked only part of the river; it was only much later, when the river changed course and became congested with debris, that passage was completely obstructed.

The court rejected this defense, noting that such obstructions were always nuisances:

> It is difficult, therefore, to see how any such grant made in derogation of the public right previously existing, and in direct opposition to that duty, which the law casts on the Crown, of reforming and punishing all nuisances which obstruct the navigation of public rivers, could have been in its inception valid at common law. . . . We are, therefore, of opinion that the legality of this weir cannot be sustained on the

> supposition of any power existing by law in the Crown in the time of Edward I, which is now taken away.

Wilcox, 8 Ad. & E. at 333-34.[5]

Obstructions to fish passage were not only protected by common law nuisance actions, but by legislation. The Magna Carta provided "that all weirs from henceforth shall be utterly pulled down by Thames and Medway, and through all England except by the sea-coast." Chitty, *supra*, at 246, 351. Lord Coke and others interpreted this provision to require that the owners of river banks keep the rivers open for both navigation and fish. *Id.* at 246.

The Magna Carta was followed by a long series of statutes that treated obstructions to waterways as public nuisances, forbidding the erection of new weirs, and the enhancing or enlarging of those which had existed prior to its adoption. Chitty, *supra*, at 248, 249 (discussing various acts); Woolrych, *supra*, at 193 (same). For example, a 1393 statute granted the citizens of London the right to "remove and take away all the weirs in the waters of the Thames and Medway" to ensure safe fish passage. Chitty, *supra*, at 372-73. Similarly, a law enacted during the reign of Edward IV declared that mill dams and other obstructions "had

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[5] Ultimately, however, the court sided with the plaintiff in *Wilcox* because it concluded that balance struck in the Magna Carta provided that all obstructions erected prior to its adoption in 1215 A.D., would be permitted to continue in their present form, even as new barriers were prohibited. Protection for these ancient obstructions was a carefully constructed compromise, which ensured that all future weirs and dams would guarantee the free passage of fish. *Wilcox*, 8 Ad. & E. at 335-36.

been enhanced, levied, and enlarged, so as to destroy the fish, and endanger the navigation," and so a penalty of one hundred marks was applied to offenders for every month that such obstructions remained unrectified. Woolrych, *supra*, at 193.

Later, Parliament enacted statutes that prohibited dams, steps, mills and other obstructions unless their design was approved by designated persons or committees, which were charged with ensuing proper fish passage. For example, the commissioners of sewers had authority, under certain circumstances, to abate mills, mill stanks and other obstructions by virtue of the powers extended to them by the statute of sewers. Woolrych, *supra*, at 243; *see also* Blackstone, *supra*, at 39, n.13 (discussing 1785 act preventing the erection hedges, stone steps, mills and other obstructions in waterways, except if leave was given by the court "under such conditions for preventing the obstruction of fish passage and ordinary navigation"). These laws were enacted with particular regard to the life cycle of salmon and other anadromous fish. Woolrych, for example, discusses a statute that required all mill-owners to keep open a sufficient space "for the salmon to pass and repass freely up and down the said rivers" between November and May of each year. Woolrych, *supra*, at 173.

Those blocking fish passage were liable in civil and criminal proceedings and were often required to modify the structure or have it torn down. Woolrych, *surpa*, at 228-30. The public itself had a "right to remove obstructions which impede the enjoyment of their common privileges" so long as they could do so without breach of the peace. Woolrych, *supra*, at 222. The

court also could order that structures preventing fish passage, such as those "prevent[ing] salmon from coming up river to spawn" be "cut and destroyed . . . and demolished." *Id.* at 222-23.

These rules prohibiting obstructions were not limited to navigable waters. Private fisheries were also to remain unobstructed under English common law. For example, Woolrych states that "the possessor of such a [private fishery] right cannot use it to the detriment of his neighbor." Woolrych, *supra*, at 30-31. Individuals who owned an interest in a private fishery (e.g., several fishery, common of piscary), through riparian land ownership, grant, custom, or prescription, possessed several remedies against persons who placed obstructions in the water that impeded fish passage.

The prohibition on obstructions of non-navigable waterways was discussed at length in the oft-cited case of *Weld v. Hornby*, 103 Eng. Rep. 75, 7 East 196 (K.B. 1806). In *Weld*, the plaintiff possessed private fishing interests for the past several decades in parts of the Ribble River. The defendant's predecessors had erected a weir across the river near their mill under authority of deeds that were more than 200 years old. Prior to 1766, however, the weir was constructed entirely of brushwood. After that date, the owner of the mill erected a solid stone weir across two-thirds of the river, leaving the other one third composed of brushwood. None of the upstream fishery owners made an objection to this change. Then in 1784, the defendant removed the remaining third of the brushwood weir and extended the stone weir completely across the river. Nearly 20 years later, the plaintiff filed suit, arguing

that the weir almost completely blocked the passage of fish and was therefore a nuisance. The jury concluded that the weir was prejudicial to the plaintiff, but it found for the defendant based on the length of time that the weir had existed. The court set aside that jury verdict, however, holding that the weir constituted a public nuisance.[6]

The same rules appear to have existed throughout the United Kingdom. In an early Irish case, for example, an individual who obstructed the river Bann with weirs and traps made of wood, stone, and other substances, was charged with trespass. *Hamilton v. Marquis of Donegall*, 3 Ridgeway's Parl Cases 267, 268 (Ire. 1795). The river was 158 feet wide, and the

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[6] This prohibition against obstructions to waterways is analogous to such prohibitions for land-based easements. The typical common law rule prevented a landowner from erecting an obstruction within the easement of another. For example, in *The King v. Ward*, 4 Ad. & E. 335 (1836), the defendant erected a causeway to make it easier for ship passengers to embark and disembark ships. But the causeway partially obstructed the Medina River, and the causeway builder was charged with criminal negligence. The builder argued that the inconvenience of the obstruction was justified by the resulting public benefit, but the court rejected his argument as irrelevant and found him guilty.

In doing so, the *Ward* court analogized to other cases, both real and hypothetical, involving obstructions of easements. For example, the court stated that a properly constructed hoard (a temporary solid structure at a construction site that prevents unauthorized access) erected in a street while building repairs were ongoing, would not create nuisance liability, because it "was placed for the safety of those possessing the right of way: it protects them from inevitable danger" while still "leav[ing] them a free passage, and sends them another way if the whole street is necessarily obstructed." *Id.* at 405. On the other hand, "[a] permanent hoard would be abatable as a nuisance." *Id.*

defendant's obstructions occupied just 48 feet. *Id.* at 286. Statutes required only 21-foot openings in rivers to allow for boat and fish passage, and the defendant argued that, as a result, no error had been committed. *Id.* But the plaintiff claimed that the common law still compelled liability for obstructing the river, because those portions of the river that were not occupied by the defendant's structures developed currents that were too fast for the salmon, trout and other fish to migrate. *Id.* at 286-87. As a result, fish were prevented from swimming upstream to the plaintiff's fishery. *Id.* at 269, 281.

The jury found for the plaintiff, and the defendant appealed to the Court of Exchequer and the House of Lords, both of which affirmed the jury verdict. *Id.* at 328. Woolrych summarized the latter decision in his famous treatise as concluding that the "owner of the lower fishery [could not] make such an alteration in the stream, the common medium of both fisheries, as to destroy the rights of the upper one," "[f]or it was not competent to the plaintiff in error to alter the condition of the fishery, nor to obstruct the passage of fish from the sea into the plaintiff's fishery in any manner not essentially necessary to enable her to exercise her right of catching fish, in their passage up the river." Woolrych, *supra*, at 230.

The law was similar in Scotland. As in England, Parliament acted early on to prohibit obstructions to navigable waterways. For example, a statute enacted in 1318 provided "that all those who have cruives, fisheries, ponds or water-mills" in navigable waterways "where young salmon, smolts or the fry of other kinds of fish of the sea or fresh water descend and ascend,"

must position such machinery to ensure that "no fry of fish are impeded from ascending and descending."[7]

English precedent was also consonant with Scottish judicial decisions. For example, in *Viscount Arbuthnott v. Scott*, UKHL 4 Paton 337 (1802), upper riparian owners who held a several fishery along the North Esk River complained that a lower riparian property owner's dam dyke was obstructing the passage of fish. The structure was constructed without leaving any gaps, and the top of the dyke was very broad, completely dry, and of great height, leaving no possible chance of the fish swimming upstream except during floods. *Id.* at 341, 343. The appellants argued that this was a nuisance under the common law, because "the respondent can only exercise his own right of fishing in such a manner as not to injure the interests or rights of fishing of the upper heritors," yet his dam dyke was creating a "total obstruction to the passage of the fish." *Id.* at 341.

The House of Lords agreed with the appellants, concluding that "[t]he law, as to nuisances, must be the same in both countries" – England and Scotland. *Id.* at 343. Although the respondents had an easement, "it must be enjoyed and exercised so as not to prejudice other rights on the same river, emulously, negligently, or otherwise." *Id.* at 245. The respondents had violated that maxim here. *See also Bailie v. Lady*

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[7] The school of history at the University of St. Andrews has digitized *The Records of the Parliaments of Scotland to 1707* and has made this resource available on-line. This particular 1318 Act can be found at http://www.rps.ac.uk/search.php?action=print&id=304&filename=roberti_trans&type=trans (last visited Mar. 29, 2018).

Saltoun, 1821 Sess. Cas. 2016 (Scot. 2d Div), *reprinted* in Cases Decided in The Court of Session From May 12, 1821 to July 11, 1822, Vol. 1 216-17 (1834) (approving an action to enjoin a weir because it was weir "injurious to . . . his rights of fishing"). By 1869, Charles Stewart's *A Treatise on the Laws of Scotland Relating to Rights of Fishing* could declare confidently that all artificial structures "which form even a partial obstruction, or tend to frighten the fish, are illegal . . . and it is no defence to an action for the removal of such contrivances, that the right to use them has been expressly conveyed by grant, or that they have been in use for the prescriptive period, or for time immemorial." *Id.* at 167-68. *See also Countess Dowager of Seafield v. Kemp*, 36 S.L.R. 363 (S.C. 1899) ("Every proprietor of salmon-fishings is injured if the spawning beds are spoiled"); *Earl of Kintore v. Pirie*, UKHL 838, 839, 43 S.L.R. 838 (1906) (stating that no interference shall be made which materially obstructs the passage of fish").

The law was clear across the United Kingdom. No one could obstruct fish passage so as to interfere with a public or private fishing right. If they did, the obstacle must be modified or removed at the owner's expense.

II. U.S. STATES ADOPTED COMMON LAW PROHIBITIONS ON OBSTRUCTIONS TO FISH PASSAGE THROUGH CASELAW AND STATUTES

Early in U.S. history, the states adopted English common law on fisheries. Of course, some states made modifications to English law, especially to take into account the different geography in this country.[8] These modifications tended to be modest, however, producing only minor differences between U.S. and English law.

Importantly, English common law precluding the obstruction of fish passage in navigable and non-navigable waterways was almost universally adopted in the United States. Scholars and courts often stated that private parties could not exercise their rights in a manner that would cause "injury to the private rights of others," and therefore, "imped[ing] the passage of fish up the river by means of dams or other obstructions" was prohibited. Darius H. Pingrey, *Treatise on the Law of Real Property* 115 (1895); *see also* James Kent, 3 *Commentaries on American Law*, 411 (2d ed. 1832) (citing the English decision in *Weld*

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[8] For example, while many states retained the distinction found in England limiting public fishing rights to waterways that were affected by the ebb and flow of the tides, some states, such as Pennsylvania, decided to depart from English common law on this point and hold that public rights existed on all waterways that were navigable by boat, even if they were not affected by the tides. *Compare Adams v. Pease*, 2 Conn. 481, 482-84 (1818) (adopting the English common law test), *with Carson v. Blazer*, 2 Binn. 475, 477-78 (Pa. 1810) (expanding the common law test by finding that the public maintained fishing rights on inland rivers such as the Susquehanna, which were navigable by boat but not affected by the tides).

and noting that "[t]his right of fishery in rivers not navigable, is also subject to the qualification of not being so used as to injure the private rights of others; and it does not extend to impede the passage of fish up the river by means of dams or other obstructions"); J.B. Phear, *A Treatise on Rights of Water* 26-28 (1859) (citing decisions from the United Kingdom in *Weld* and *Marquis of Donegall* while noting that U.S. riparian landowners cannot "work any material injury to the rights of other proprietors above or below on the stream"); William Wait, 3 *A Treatise upon some of the General Principles of the Law* 363 (1885) (stating that a fishing right is "subject to the reasonable qualification of not being so used as to injure the private rights of others; and it does not, therefore, extend to impede the passage of fish up the river by means of dams or other obstructions"); Henry Philip Farnham, *Law of Waters and Water Rights* 1405-10 (1904) ("No riparian owner has a right to place an obstruction in a stream which will interfere with the passage of fish to land of owners living further up. And this rule applies to the erection of dams . . . [which] must contain ways through which the fish can pass").

The leading American treatise in this area of the law, Joseph K. Angell's *Treatise on the Law of Watercourses* (5th ed. 1854), explained:

> Even the exclusive right of fishery in rivers not navigable, is subject to a reasonable qualification, in order to protect the rights of others, who have a similar interest, but might lose all advantage from it, if their neighbors below them could with impunity wholly impede the passage of fish. The right of several fishery

> is clearly limited to the right of taking fish, and does not carry with it the right to hinder the passing of them above, and of preventing the suprariparian proprietors from enjoying a similar privilege.

Id. at 82-83.[9] *See also State v. Roberts*, 59 N.H. 256, 257 (1879) (noting that "while the riparian owner has the exclusive right of fishery upon his own land, he must so exercise that right as not to injure others in the enjoyment of a similar right upon their lands upon the stream above and below. He must not, by means of dams or other artificial obstructions, prevent the passage of fish up and down the stream, nor can a prescriptive right to maintain such obstructions be acquired in any of the waters of this state").

As in England, a public or private nuisance suit could be brought against persons who obstructed the passage of fish to upstream users. Additionally, just as England enacted statutes regulating obstructions of waterways, by the mid-1850s when the Stevens treaties were negotiated, more than a dozen states had passed legislation prohibiting obstructions in waterways that could impact fish passage including Connecticut,[10] Florida,[11] Georgia,[12] Kentucky,[13] Maine,[14]

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[9] As in England, this prohibition on obstructions of waterways is similar to the prohibition on such obstructions for easements in general. When an easement is present, the servient estate holder "may be enjoined from placing obstructions upon the way which materially interfere with the grantee's use of it." Leonard A. Jones, *A Treatise on the Law of Easements* 314 (1898).

[10] Act of Oct. 1785, 1785 Conn. Pub. Acts 330; Act of May 1798, 1798 Conn. Pub. Acts 488; *The Public Statute Laws of the State of Connecticut* 269 (Act of 1824 for encouraging and regulating

Massachusetts,[15] New Hampshire,[16] New York,[17] North

Fisheries), 278 (Act of 1824 in addition to an Act entitled "an Act for encouraging and regulating Fisheries"), 479 (An Act of 1838 to prevent and remove Nuisances in Highways, Rivers, and Watercourses) (John S. Boswell ed., 1839).

[11] Act of Feb. 10, 1832, Fla. Stat. Ann. § 861.02 (West 2017).

[12] Act of Feb. 15, 1799, 1799 Ga. Laws 141; Act of March 1, 1799, 1799 Ga. Laws 280; 2 *Historic Georgia Digests and Codes* 905 (Act of Dec. 15, 1809), 906 (Act of Dec. 18, 1816), 923 (Act of Dec. 9, 1824), 907 (Act of Dec. 18, 1824; Act of Dec. 24, 1825; Act of Dec. 22, 1829), 925 (Act of Dec. 26, 1835), 917 (Act of Dec. 28, 1836), 940 (Act of Dec. 21 1839), 919 (Act of Dec. 23, 1839), 936 (Act of Dec. 23, 1839), 914 (Act of Dec. 25, 1842), 930 (Act of Jan. 26, 1850) (Thomas R. R. Cobb ed., 1851).

[13] *Bibb v. Montjoy*, 5 Ky. 1 (2 Bibb.) 3–4 (1810) (discussing 1797 law requiring persons desiring to construct mill dams across waterways to receive approval for such dams to ensure no obstruction to fish passage); 2 *Statute Law of Kentucky* 948 (Act of Feb. 10, 1816) (William Littell & Jacob Swigert 1822); Act of February 27, 1849, 1849 Ky. Acts 37.

[14] *Peables v. Hannaford*, 18 Me. 106 (1841) (interpreting 1839 Act requiring fish committee to remove all incumbrances from certain waterways during spawning season, where fish run from May 5th through July 5th each year); *Bearce v. Fossett*, 34 Me. 575 (1852) (discussing 1789 and 1826 Acts mandating fish passage); Act of Feb. 28, 1821, 1874 Me. Laws 46; Act of Mar. 17, 1821, 1874 Me. Laws 84.

[15] I *Private and Special Statutes of the Commonwealth of Massachusetts* 272 (Act of Mar. 4, 1790) (Manning & Loring 1805); Act of Mar. 1, 1799, 1799 Mass. Acts 281; Act of Mar. 7, 1844, 1852 Mass. Acts 92, *reprinted in Laws relating to Inland Fisheries in Massachusetts* 229 (Wright & Potter 1887).

[16] *Little v. Perkins*, 3 N.H. 469 (1826) (discussing 1824 Act that prohibited dams from obstructing fish passage between May and October each year); Act of June 18, 1790, 1790 N.H. Laws 527, *reprinted in* 5 *Laws of New Hampshire* 527 (Henry Harrison Metcalfe ed., 1916).

Carolina,[18] Pennsylvania,[19] Rhode Island,[20] South Carolina,[21] Tennessee,[22] Vermont,[23] Virginia,[24] and Wisconsin.[25]

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[17] Act of Mar. 28, 1800, 1800 N.Y. Laws 522, *reprinted in Laws of the State of New York* (Loring Andrews ed., 1800).

[18] *Dunn v. Stone*, 4 N.C. 241 (1815) (discussing 1787 statutes requiring dams to leave one-quarter of width of rivers open for fish passage).

[19] *See* 8 *The Statutes At Large of Pennsylvania* 36 (Act of Mar. 9, 1771, ch. 627), 386 (Act of Jan. 22, 1774, ch. 642) (James T. Mitchell & Henry Flanders eds., 1902); Act of Apr. 15, 1835, 1836 Pa. Laws 138.

[20] *The Public Laws of the State of Rhode Island and Providence Plantations* 490 (Act of 1735), 494 (ACT OF 1779 & 1792), 496 (ACT OF 1736; 1743; 1798), 498 (Act of 1798), 499 (Act of 1798) (Carter & Wilkinson 1798).

[21] *Boatright*, 24 S.C.L. (Rice) at 451 (discussing 1827 law designed to prevent obstructions to the passage of fish up several rivers and appointing board of commissioners to ensure the same); *Tarrar & Miller v. Nunamaker*, 39 S.C.L. (5 Rich.) 484 (S.C. Ct. App. 1852) (same); 7 *The Statutes At Large of South Carolina* 531 (Act of Mar. 26, 1784) (David J. McCord ed., 1840); 5 *The Statutes at Large of South Carolina* 82 (Act of Feb. 29, 1788), 93 (Act of Nov. 4, 1788), 217 (Act of Dec. 21, 1792), 508 (Act of Dec. 19, 1805), 579 (Act of Dec. 15, 1808) (Thomas Cooper ed., 1839).

[22] 1 *Laws of the State of Tennessee* 384 (Act of 1787) (Edward Scott ed., 1821).

[23] *State v. Theriault*, 41 A. 1030 (Vt. 1898) (applying 1797 Act, which makes the erection of any artificial structure "whereby navigation or the passage of fish may be obstructed, a nuisance," and punishes the same); Act of Mar. 8, 1787, 1787 Vt. Acts & Resolves 72.

[24] Act of Oct. 1785, ch. LXXXII, 1785 Vt. Acts 62; 3 *Statutes at Large of Virginia* 409 (Act of Jan. 15, 1808) (Samuel Shepherd ed., 1836).

[25] An Act regulating fisheries, 1839 Wis. Sess. Laws 121.

The Territories of Oregon (from which the Washington Territory was separated out) and Washington, where treaties protecting the tribal right to "take fish at all usual and accustomed grounds and stations" were negotiated,[26] also prohibited persons from obstructing rivers in a manner that would impede fish passage. The Oregon Territorial Act adopted by Congress in 1848, provided as follows:

> That the rivers and streams of water in said Territory of Oregon in which salmon are found, or to which they resort, shall not be obstructed by dams or otherwise, unless such dams or obstructions are so constructed as to allow salmon to pass freely up and down such rivers and streams.

Act of Aug. 14, 1848, § 12, 9 Stat. 323, 328.

This provision was not in the original bill. Rather, it was added on the floor of the House at the request of Massachusetts Representative Joseph Grinnell. Grinnell was well acquainted with the drastic reductions in fish populations that could occur if waterway obstructions were not prohibited, as his own state had struggled with this issue for nearly a century. On the floor of Congress, the discussion was summarized as follows:

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[26] Tribal fishing rights were protected by federal law even prior to the negotiation and ratification of these treaties in the 1850s. For example, a December 23, 1844 act "[i]n relation to Indians" in the Oregon Territory provided "[t]hat the Indians shall be protected in the free use of . . . such fisheries as they have heretofore used." *Laws of a General and Local Nature Passed by the Legislative Committee and Legislative Assembly Collected and Published* 70 (1853).

> Mr. GRINNELL moved a new section, to come in between the 11th and 12th sections, providing that the rivers and streams in the Territory in which salmon are found shall not be obstructed by dams or otherwise unless so made as to allow said fish to pass freely.
>
> He said there was now a valuable fishery in Oregon, and unless some care was taken of it, it would be lost. For the want of care, by the erection of a dam, &c., in the Connecticut river, the salmon, which formerly had been very valuable there, had been driven out. This might be avoided in this Territory, with care, without expense.
>
> The amendment was agreed to.

Cong. Globe, 30th Cong., 1st Sess. 1020 (1848). This statement directly contradicts the claims of the Petitioner and its amici that salmon were considered "inexhaustible" at treaty times, and that neither treaty party could have envisioned a drastic reduction in their supply.[27]

The Territory of Washington was established in 1853. In the Washington Territorial Government Act

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[27] Federal negotiators surely knew that wildlife was not an inexhaustible resource. The fur trade had drastically reduced many species by the middle of the nineteenth century, and resource conflicts between Indian tribes and white settlers were already occurring. For example, in 1855, the same year that many of the Stevens Treaties were negotiated, the Mille Lacs Band in Minnesota was locked in a contentious dispute with lumberman who had erected a dam on the Rum River that was destroying the Tribe's wild rice beds. The Tribe actively asserted that their treaty rights precluded such obstructions. *See, e.g., Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 182 (1999).

of that same year, Congress provided that "legislation of Congress in reference to the Territory of Oregon," along with "legislative enactments of the Territory of Oregon" would apply within the Territory of Washington so long as they were "not inconsistent with, the provisions of this act." Act of Mar. 2, 1853, § 12, 10 Stat. 172, 177. As a result, the requirement that dams or other obstructions be constructed "to allow salmon to pass freely up and down such rivers and streams" was the law in the Territory of Washington from its very inception, including at the time the treaties in this case were negotiated. Act of Aug. 14, 1848, § 12, 9 Stat. 323, 328. Ultimately, the Washington Territory both explicitly received English common law and enacted its own prohibition on obstructing the passage of salmon during spawning season. *See Code of Washington 1881, available at* http://leg.wa.gov/CodeReviser/documents/sessionlaw/1881Code.pdf , Ch. 1, § 1 ("The common law of England, so far as it is not repugnant to, or inconsistent with the constitution and laws of the United States and the organic act and laws of Washington territory, shall be the rule of decision in all the courts of this territory") and Ch. 411, § 1173 (requiring any person who may build an obstruction in any river in the Territory to "construct a suitable fish way by which [salmon] may reach the water above said dam, or obstruction" and providing that any person who creates an obstruction that "may prove an absolute bar to the passage of fish frequenting the same for the purpose of spawning" may be fined or sentenced to up to one year in county jail).

By the end of the nineteenth century, this web of common law and statutory law had generated a robust

body of caselaw in the United States ensuring that waterway obstructions did not impede the passage of fish. Emory Washburn, *Treatise on the American Law of Easements and Servitudes* 330 (1863). Many of the cases litigated involved dams or mills that had been authorized by legislative acts, and years after their construction, the current owner was being pressed to alter that structure to ensure fish passage upstream. Courts consistently concluded that these obstructions created a nuisance.

For example, in *Stoughton v. Baker*, 4 Mass. 522 (1808), the Massachusetts Supreme Court held that the town of Dorchester, in authorizing the construction of a dam on the Neoponset River a century earlier, did not preclude its more recently created fishery committee from requiring modification to the dam to provide for fish passage. The court stated that:

> every owner of a watermill or dam holds it on the condition, or perhaps under the limitation, that a sufficient and reasonable passage-way shall be allowed for the fish. This limitation, being for the benefit of the public, is not extinguished by any inattention or neglect, in compelling the owner to comply with it. For no laches can be imputed to the government, and against it no time runs so as to bar its rights.

Id. at 528; *see also*, *State v. Franklin Falls*, 49 N.H. 240, 250 (1870) (holding that criminal indictment for maintaining a nuisance was proper where the defendant's dams obstructed the passage of fish, even though the dams were constructed more than 20 years ago); *Parker*, 111 Ill. at 586, 590 (concluding that dam, which was first built in 1836, modified with legislative

authorization, and had always obstructed the passage of fish, was required to be remediated because "[u]nder the common law, obstructions to the passage of fish were held to be public nuisances, and subject to legislative control"); *West Point Water Power & Land Imp. Co. v. State*, 66 N.W. 6, 7 (Ne. 1896) (enforcing state statute requiring artificial structures in waterways to be modified to create "a suitable and substantial fishway" even though the territorial legislature had previously authorized the defendant's milldam); *State v. Beardsley*, 79 N.W. 138, 140 (Iowa 1899) (requiring defendant to modify his dam constructed more than 20 years earlier, noting that "[t]he law seems to be . . . definitely settled in favor of the public, to protect fish, and provide for their passage along the streams, as well in unnavigable as in navigable waters")

As the preceding discussion establishes, when the Stevens treaties were being negotiated, obstructions to waterways that impeded the passage of fish were actionable public or private nuisances in both the United Kingdom and the United States. The federal drafters of the Stevens treaties would have fully understood this, and the words they chose prevent the State from blocking fish passage. In arguing that it may maintain barrier culverts that prevent anadromous fish from traveling from freshwater to sea and back, the State takes the untenable position that the treaties provide tribes with even fewer rights than those same words would provide at common law. This Court should reject such an unjust and narrow interpretation of these federally protected rights.

CONCLUSION

The judgment of the United States Court of Appeals for the Ninth Circuit should be affirmed.

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No. 17-269

In The Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, et al.,

Respondents.

On Writ Of Certiorari To The United States Court Of Appeals For The Ninth Circuit

BRIEF OF MODOC POINT IRRIGATION DISTRICT; MOSBY FAMILY TRUST; TPC, LLC; SPRAGUE RIVER WATER RESOURCE FOUNDATION, INC.; AND FORT KLAMATH CRITICAL HABITAT LANDOWNERS, INC. AS *AMICI CURIAE* IN SUPPORT OF PETITIONER

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QUESTIONS PRESENTED

1. Whether a treaty "right of taking fish, at all usual and accustomed grounds and stations . . . in common with all citizens" guaranteed "that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes."

2. Whether the district court erred in dismissing the State's equitable defenses against the federal government where the federal government signed these treaties in the 1850s, for decades told the State to design culverts a particular way, and then filed suit in 2001 claiming that the culvert design it provided violated the treaties it signed.

3. Whether the district court's injunction violates federalism and comity principles by requiring Washington to replace hundreds of culverts, at a cost of several billion dollars, when many of the replacements will have no impact on salmon and Plaintiffs showed no clear connection between culvert replacement and tribal fisheries.

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Pursuant to Supreme Court Rule 37 the Modoc Point Irrigation District; Mosby Family Trust; TPC, LLC; Fort Klamath Critical Habitat Landowners, Inc.; and Sprague River Water Resource Foundation, Inc. (collectively "*amici* Modoc Point" or "*amici*") respectfully submit this brief as *amici curiae* in support of Petitioner State of Washington.[1]

IDENTITY AND INTERESTS OF *AMICI CURIAE*

Amici and their members consist of small and family-owned businesses that operate cattle ranches in Klamath County, Oregon. Their ranches are located either within the former Klamath Indian Reservation that was set aside under the 1864 treaty between the United States and the Klamath and Modoc Tribes and Yahooskin Band of Snake Indians (Klamath Tribes), 16 Stat. 707 (Klamath Treaty); or, in some cases, on lands outside of the former Reservation that were either ceded by the Klamath Tribes in the Klamath

[1] Counsel of record for all parties received written notice, either by letter or by email, at least ten days prior to the due date of the intention of *amici* to file this brief. Petitioner has filed a blanket consent to filing of *amici* briefs. The Solicitor General has provided a written consent to the *amici* Modoc Point. Respondent Tribes have also provided written consent to the filing of this brief. Pursuant to this Court's Rule 37.6, the *amici* submitting this brief and their counsel represent that no party to this case nor their counsel authorized this brief in whole or in part, and that no person other than *amici* paid for or made a monetary contribution toward the preparation and submission of this brief.

Treaty or in the subsequent Cessions Agreement of 1901 (Cessions Agreement). 34 Stat. 325, 367; *see Oregon Dept. of Fish & Wildlife v. Klamath Indian Tribe*, 473 U.S. 753, 755-61 (1985) (*ODFW*).

Similar to the State of Washington's long-running "environmental servitude" litigation regarding the Stevens Treaties, *amici* are trapped in decades-long litigation with the United States in which the federal government asserts instream water rights to support "healthy and productive" habitat in support of the Klamath Tribes' non-exclusive treaty fishing rights.

While the Klamath Treaty and the Stevens Treaties both incorporate fisheries components they were expressed by different wording and were developed under different regional and historical contexts. Nevertheless, since the 1970s, litigation over the fisheries purposes in the Stevens Treaties and the Klamath Treaty has resulted in the treaties being increasingly entangled and melded, placing the State of Washington and *amici* in strikingly similar predicaments. The Ninth Circuit Court of Appeals' decision below reflects a culmination of this entanglement.

By ignoring the history and context surrounding the individual treaties, the Ninth Circuit adopted a singular focus on non-exclusive tribal fishing rights to the derogation of other primary purposes expressed in the various treaties, such as the cession of land as well as the development of agriculture and modern civilization.

In the decision below, the Ninth Circuit found that the Stevens Treaties impliedly promised that "the number of fish would always be sufficient to provide a 'moderate living' to the Tribes[,]" and expressly founded that holding in part based on its holding in *United States v. Adair*, 723 F.2d 1394 (9th Cir. 1983) *cert. denied*, 419 U.S. 1019 (*Adair II*). In *Adair II*, the Ninth Circuit held that the Klamath Treaty entitled the United States, as trustee for the Klamath Tribes, "the amount of water necessary to support [the Tribes'] hunting and fishing rights as currently exercised [on former reservation lands] to maintain the livelihood of Tribe members." *Id.* at 1414;[2] *see* Pet. App. 93a-94a. The holding in *Adair II* was in turn founded, in part, on this Court's decision in *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658 (1979) (*Fishing Vessel*), interpreting the Stevens Treaties. *See Adair II*, 723 F.2d at 1414-15. Relying on *Adair II* and this Court's reserved water right doctrine, the panel below erroneously implied a retroactive 'environmental servitude' burdening lands that were ceded in the Stevens Treaties, an approach that improperly rewrites the treaties; and, in doing so

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[2] To be clear, the scope of *Adair II* was limited to instream water rights on former reservation lands that the Klamath Tribes and its Trustee sold to the United States and now consist of the Klamath Marsh National Wildlife Refuge. *See, infra*. However, as explained below, the State of Oregon subsequently applied the *Adair II* decision to grant tribal instream water rights burdening *amici*'s private lands that were severed from the reservation as allotments under the General Allotment Act or as Termination Act sales.

ignores subsequent Congressional enactments. *See generally ODFW*, 473 U.S. 753; Brf. of Pet. at 15, 32.

The concept of an implied environmental servitude over ceded, allotted or sold lands is not supported by the text, context or history of the treaties. Further, it interferes with the attainment of the other equally important purposes established in the treaties. While the treaties included provisions to provide economic stability for the tribes, only part of the economic stability purpose was based on the continuation of a subsistence lifestyle. Another equally important economic component was the development of an agrarian lifestyle. Likewise, the treaty purposes also included the ceding of all right, title and interest of the tribes as to their claims on large expanses of land – cessions that were important to the United States in order to allow for the subsequent development of the ceded lands, unencumbered by aboriginal rights. *See* Brf. of Pet. at 7.

Amici submit this brief to request that the Court disentangle, reject and reverse the Ninth Circuit's rewrite of the applicable treaties. The Court should draw a bright line holding that environmental servitudes simply do not exist on ceded, allotted, and sold lands, or lands otherwise no longer owned by the tribes. Alternatively, the Court should find that the environmental servitude recognized by the Ninth Circuit is overbroad and unworkable because it fails to balance other primary treaty purposes. The Court should also make clear the availability of equitable defenses to those, such as the State of Washington and *amici*, who are subject to the claims by the United States for the

recognition and enforcement of tribal encumbrances over lands ceded by an Indian Tribe, or otherwise developed or sold in accordance with the various acts of Congress.

STATEMENT OF THE CASE

While *amici* adopt the State of Washington's Statement of the Case, *amici* present the following discussion to provide greater depth on the historical and procedural background relative to the body of Ninth Circuit precedents that underlie the decision below.

Article I of both the Stevens Treaties, and the Klamath Treaty, begin with unequivocal statements, varying slightly in form but identical in substance, declaring that the tribes "cede," "relinquish," and "convey" to the United States all their "right," "title," "interest" and "claim" to "all of the country" "claimed" or "occupied" by them. *See* Brf. of Pet. at 4 (citations omitted); 16 Stat. 707 (Klamath Treaty). In *ODFW*, this Court recognized that "general conveyances" which reference 'all right, title and claim' to the described property "unquestionably" carry with them whatever special rights the Indians previously possessed over such ceded lands. *ODFW*, 473 U.S. at 766.

However, some of the referenced treaties reserved "from the lands above ceded" a tract of land for the "use and occupation" of the aforesaid tribes, including the "exclusive right of taking fish" from the streams within (and, in some cases, bordering) the reservation. *See*,

e.g., 12 Stat. 951 (Treaty with the Yakima); 16 Stat. 707 (Klamath Treaty). In addition, the Stevens Treaties uniquely included a provision providing that it "is further secured to said [tribes] the right of taking fish at all usual and accustomed places, in common with citizens of the United States[,]" *see, e.g.*, 12 Stat. 951 (Treaty with the Yakima), a provision that is absent from the Klamath Treaty.

In 1905, in *United States v. Winans*, this Court held that the Stevens Treaties' securing of a right to fish at usual and accustomed places "was not a grant of right to the Indians, but a reservation of those not granted[,] thereby 'impos[ing] as a servitude upon every piece of land as though described therein.'" *United States v. Winans*, 198 U.S. 371, 381 (1905) (*Winans*). Following *Winans*, through the 1970s, this Court issued several decisions defining the scope of that servitude. For example, in addition to the access right recognized in *Winans*, in *Puyallup Tribe v. Dept. of Game of Washington*, this Court subsequently found that the servitude also preempted certain state fishing regulations. *Puyallup Tribe v. Dept. of Game of Washington*, 391 U.S. 392, 399 (1968)). Likewise, in *Fishing Vessel*, this Court narrowed the servitude by limiting treaty Tribes' to "a fair share of the available fish." *Fishing Vessel*, 443 U.S. at 685. Importantly, in *Fishing Vessel*, this Court affirmed the imposition of a firm ceiling on the treaty Tribes' "fair share" of fish at 50% in order to avoid "frustrating the treaty right of 'all other citizens of the Territory.'" *Id.* at 686. As this Court explained:

> [a]s in *Arizona v. California*, [373 U.S. 546 (1963)] and its predecessor cases, the central principle here must be that Indian treaty rights to a natural resource that once was thoroughly and exclusively exploited by the Indians secures so much as, but no more than, is necessary to provide the Indians with a livelihood – that is to say, a moderate living.

Id.

In contrast to the Stevens Treaties, the Klamath Treaty did not reserve any off-reservation fishing rights. Rather, the Klamath Treaty provided that the Klamath Tribes would have "exclusive" fishing rights within the confines of the land reservation the United States set apart as a "residence" for them in the Treaty. The Klamath Reservation later became fragmented as lands were sold by the Klamath Tribes or allotted by the United States under the General Allotment Act. Eventually the balance of the Reservation was terminated and sold under the Termination Act. However, in the 1970s the Ninth Circuit declared that despite the sale and termination of the reservation lands, the Klamath Tribes retained non-exclusive hunting and fishing rights on some of the former Klamath Reservation lands. *See generally Kimball v. Callahan*, 493 F.2d 564 (9th Cir. 1974) (*Kimball I*); *Kimball v. Callahan*, 590 F.2d 768 (9th Cir. 1979) (*Kimball II*).

Historically, the Klamath Reservation initially consisted of 1.9 million acres the United States "set apart as a residence" for the Klamath Tribes from the 22 million acres that the Tribes ceded in the treaty. *See*

ODFW, 473 U.S. at 755; 16 Stat. 707 (Klamath Treaty). Subsequently, it was discovered that 617,000 acres of the land described in the Klamath Treaty had been erroneously excluded from the reservation. *ODFW*, 473 U.S. at 757. By agreement the Klamath Tribes ceded those acres under the 1901 Cessions Agreement, which was ratified by Congress in 1906. 34 Stat. 325, 367. This Court in 1985 expressly found that, since the 1901 Cessions Agreement lands were ceded with the same unequivocal language as the other 20 million acres that had been ceded free and clear of encumbrances under the Klamath Treaty, the Cessions Agreement's "general conveyance unquestionably carried with it whatever special hunting and fishing rights the Indians had previously possessed." *ODFW*, 473 U.S. at 766.

Of the lands remaining within the Klamath Reservation after the 1901 Cessions Agreement, approximately 25% passed under the Treaty and General Allotment Act (28 Stat. 388) from tribal to individual Indian ownership and were developed for irrigated agriculture. *Adair II*, 723 F.2d at 1398. Over time, many of these lands passed on to non-Indians. *Id.* In many cases, this agricultural development was undertaken with the assistance, design and direction of the U.S. Indian Irrigation Service in fulfillment of the Klamath Treaty, the General Allotment Act, and/or the 1901 Cessions Agreement. For example, in the 1901 Cessions Agreement the parties specifically agreed that some of the funds from the purchase would be expended to support agricultural practices on the remaining Klamath Reservation lands:

> [proceeds from the sale] shall be expended for the benefit of said Indians . . . in the drainage and irrigation of their lands, and the purchase of stock cattle for issue to said Indians, and for such other purposes as may, in his opinion best promote their welfare[.]

34 Stat. at 367-68.

As described in more detail in the Modoc Point *et al.*'s Brief in Support of Petitioner's Writ of Certiorari (Modoc Cert. Brf.), *amici* Modoc Point Irrigation District, TPC, LLC, Mosby Family Trust and numerous members of Fort Klamath Critical Habitat Landowners and Sprague River Resource Foundation own thousands of irrigated acres that were allotted, ceded or sold by the Klamath Tribes within the Wood River, Sprague River and Williamson River valleys of Klamath County, Oregon. Some of those lands, and the irrigation systems benefiting these lands, were developed and funded by the Indian Irrigation Service. Modoc Cert. Brief at 4-7. In addition, the United States purchased approximately 70% of the reservation lands from the Klamath Tribes under the Termination Act, and are now held as part of the Winema National Forest and the Klamath Marsh National Wildlife Refuge. *Id.* Following the termination of the federal land reservations designated for tribal purposes, disputes arose about what, if any, treaty-reserved fishing rights survived thereafter.

In *Kimball I*, the Ninth Circuit held that tribal members who withdrew from the tribe nevertheless retained non-exclusive treaty right to hunt, trap and fish

free of state regulations on the former reservation lands, including land purchased from the Tribe by the United States and now included within the national forest system or wildlife refuge system as well as on privately-owned land on which hunting, trapping, or fishing was permitted. *Kimball I*, 493 F.2d at 569.[3] In *Kimball II*, the Ninth Circuit clarified that the court construed the termination of the reservation to convert the Klamath Tribes' hunting and fishing rights from exclusive to non-exclusive (i.e., in common with other citizens), similar to the "usual and accustomed places" fishing rights secured by the Stevens Treaties as recognized by this Court in *Puyallup*. *Kimball II*, 590 F.2d at 774; *id.* at 776-77 (relying on several of this Court's precedents governing the Stevens Treaties).[4]

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[3] The Ninth Circuit based its decision, in part, on Public Law 280 and this Court's decision in *Menominee Tribe of Indians v. United States*, 391 U.S. 404, 411-12 (1968) (*Menominee*). *See Kimball I*, 493 F.2d at 567-68. However, in *Menominee* this Court was interpreting the preservation of the right to hunt and fish free of state regulation on lands that had been transferred at termination to the Menominee Tribe pursuant to that termination agreement. In other words, following termination the Menominee Tribe owned the land that was formerly held in trust. In contrast, the Klamath Tribes and its trustee First National Bank, sold the land remaining in the reservation free of any encumbrances. Those parts acquired by the United States were later designated for national forest and wildlife refuge purposes. In light of this Court's later decision in *ODFW* that the exclusive right to hunt and fish could not survive off the reservation once the reservation was terminated (*id.* at 769-70), it is therefore questionable whether *Kimball I* remains good law.

[4] Subsequently, in *ODFW* this Court found that the Treaty did not provide for off-reservation fishing rights on lands the Klamath Tribes ceded or subsequently sold unencumbered in

Through roughly the mid-1970s, litigation concerning the fisheries purposes of the treaties focused on where the rights could be exercised and the extent to which states could regulate tribal harvests. However, on the heels of those disputes, a new brand of litigation emerged. The United States and tribes began to seek to have the courts recognize environmental servitudes for the support of the tribes' nonexclusive harvest rights against private landowners and the State of Washington.

In 1976, the United States initiated litigation against the State of Washington, arguing that the Stevens Treaties' fisheries purpose impliedly imposed a duty on the State to not impair fish habitat. Although the Ninth Circuit initially rejected such an "environmental servitude" concept because it had no basis in the treaties or precedent, *United States v. Washington*, 694 F.2d 1374, 1375, 1377 & n.7, 1380-82, 1387 (9th Cir. 1982), it subsequently vacated both that opinion and the district court's declaratory relief, while leaving open the possibility of future litigation on the subject. *See United States v. Washington*, 759 F.2d 1353, 1357 (9th Cir. 1985) (*en banc*).

Meanwhile, on September 29, 1975, the United States also sued private landowners in the Upper

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the 1901 Cessions Agreement. Because the lands the tribes sold following termination were also without encumbrance, it is questionable therefore whether the *Kimball* line of cases remain good law, or for that matter whether they are still an appropriate foundation for the *Adair II* decisions or whether *Adair II* itself is still good law.

Williamson River Basin of Klamath County, Oregon, including predecessors of TPC, LLC and the Mosby Family Trust, to establish an implied water right to support the Klamath Tribe's exercise of their non-exclusive hunting and fishing rights, as recognized in the *Kimball* cases. *See United States v. Adair*, 478 F. Supp. 336, 341 (1979) (*Adair I*). Relying on this Court's decision in *Winans*, the Oregon district court held that the United States, as trustee for the Klamath Tribes, was entitled to a water right with a "time immemorial" priority date to support the Klamath Tribes' non-exclusive hunting and fishing rights, stating: "if the preservation of these rights requires that the Marsh be maintained as wetlands and that the forest be maintained on a sustained-yield basis, then the Indians are entitled to whatever water is necessary to achieve those results." *Id.* at 345-46.

In *Adair II*, the Ninth Circuit affirmed the district court, but with a notable modification. Private landowners that were parties to the litigation, which included some of *amici*'s predecessors, expressed concern that the district court's ruling would subject the former Reservation lands to a "wilderness servitude" in favor of the Klamath Tribes. *Adair II*, 723 at 1414. Relying on this Court's decision in *Fishing Vessel*, the Ninth Circuit stated that it did "not interpret the district court's decision so expansively."

> We interpret [the district court's ruling to] confirm to the Tribe *the amount of water necessary to support its hunting and fishing rights as currently exercised to maintain the*

> *livelihood of Tribe members, not as these rights once were exercised by the Tribe in 1864.* We find authority for such a construction of the Indians' rights in the Supreme Court's decision in [*Fishing Vessel*]. [. . .] As limited by the "moderate living" standard enunciated in *Fishing Vessel*, we affirm the district court's decision that the Klamath Tribe is entitled to a reservation of water, with a priority date of immemorial use, sufficient to support exercise of treaty hunting and fishing rights.

Id. at 1414-15 (emphasis added).

As discussed in *amici*'s brief in support of Petitioner's writ of certiorari, following the Ninth Circuit decision in *Adair II*, and related litigation, the United States and Tribes filed claims in Oregon's Klamath River stream adjudication (Klamath River Adjudication) for instream water rights on practically all the fish-bearing streams flowing within or bordering the boundaries of the former reservation, including on streams flowing through *amici*'s private agricultural land. *See* Modoc Cert. Brf. at 1-8. Although that litigation has taken numerous twists and turns,[5] and remains ongoing, the State of Oregon's water right adjudicator ultimately found that *Adair II*'s incorporation of the "moderate living standard" from this Court's earlier decision in *Fishing Vessel* was "irrelevant" to the quantification of water rights and, instead, chose

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[5] *See United States v. Adair*, 187 F. Supp. 2d 1273, 1278 (D. Or. 2002); *United States v. Braren*, 338 F.3d 971, 976 (9th Cir. 2003).

to quantify the Tribal instream claims based on a "healthy and productive habitat" standard. *See id.* Under that standard, the United States, as trustee for the Tribes, was awarded instream water rights on streams throughout all the former reservation, including through *amici*'s private ranches, at levels that leave, in most years, little to no water available for *amici*'s *Winters*-based, Treaty-derived, 1864-priority agricultural water. Based upon this ruling, until the Klamath River Adjudication runs its course in the Oregon courts, the OWRD is regulating the water within the Klamath River Basin based on a "healthy and productive habitat" water right having "time immemorial" priority over all other treaty purposes. *See* Modoc Cert. Brf. at 2.

Amici are still engaged in litigation with the United States regarding the sweeping instream water rights the State of Oregon adjudicator awarded based on a novel "productive habitat" standard, which litigation includes challenges to that standard as well as to *Adair II* itself. Notably, in *Adair II*, the Ninth Circuit expressly rejected what it referred to as a "wilderness servitude" requiring habitat restoration to 1864 levels, relying on this Court's decision in *Fishing Vessel*. Yet, in the decision below, the Ninth Circuit relied on *Adair II* to affirm the district court's injunction requiring the State of Washington to replace hundreds of culverts, built decades ago, in order to restore fish habitat to undefined historical levels in the hopes of achieving undefined increases in fish populations. Expressly relying on *Adair II* and the federal reserved water right

doctrine, the Ninth Circuit held that "even in the absence of an explicit promise, we . . . infer a promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes." Pet. App. 94a. The panel effectively found that non-exclusive treaty fishing rights impliedly carry with them environmental servitudes over lands no longer owned by the Tribes.

Notwithstanding the long-standing assurance by the Ninth Circuit to private irrigators that its decision in *Adair II* did not require restoration of unrealistic pre-treaty environmental conditions, *in the decision below*, the Ninth Circuit implied the existence of just such an environmental servitude into the Stevens Treaties.

SUMMARY OF THE ARGUMENT

This Court has previously underscored that the treatment of the Stevens Treaties and Klamath Treaty fisheries language, as with all treaties, must be based on the historical record and considered in the context of the treaty negotiations to discern what the parties intended by their choices. This review of parties' intent and purposes is central to the interpretation of the treaties. *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 202 (1999) (*Mille Lacs*). The decision below reflects a trend within the Ninth Circuit of improperly focusing on one treaty purpose to the derogation of other treaty purposes.

Two long standing principles frame treaty interpretation: first, treaties are to be liberally construed in favor of Native Americans, and, secondly, they are to be interpreted in a way to reserve to the Tribes all rights necessary to effectuate the purpose[s] of the Treaty. *Menominee Tribe of Indians v. United States*, 391 U.S. 404, 406 n.2 (1968); *Winters v. United States*, 207 U.S. 564, 575-77 (1908) (*Winters*). As an irreducible minimum the treaties are to be interpreted in a manner that gives full effect to all treaty purposes, not a singular focus on one purpose to the injury of the other provisions of the treaties. Likewise, it is a long-standing canon of treaty interpretation that wording of treaties with the Indians are not to be construed in a manner to their prejudice. *Menominee*, 391 U.S. at 406 n.2. This canon is equally applicable to interpretations that serve to elevate one treaty purpose to the prejudice of the others.

In the case of the Stevens Treaties and Klamath Treaty, the federal government is actively seeking to have the courts rewrite treaty purposes and obligations by imposing an environmental servitude that threatens to significantly affect management over lands

previously allotted,[6] ceded,[7] or sold by the either the tribes[8] or its members without encumbrance. The environmental servitude recognized by the panel below is not supported by the treaties' text, context and history. Further, it also tramples upon other treaty purposes, including adoption of an agrarian way of life and the ceding of lands unencumbered. As a result, the panel's decision effectively contradicts the express terms of the treaties, Congressional mandates and the prior rulings of this Court. For these reasons the ruling should be reversed.

The Court should hold that environmental servitudes simply do not exist on lands ceded, allotted, or sold by an Indian tribe, or on lands otherwise no longer

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[6] Allotted lands represent those lands that were allotted to individual tribal members under a treaty or under the provisions of the General Allotment Act (24 Stat. 388) and amendments thereto. Under this Court's holding in *U.S. v. Powers*, 305 U.S. 527, 532 (1939), the allotment carried with it a share of the reservation's reserved water right. Some of the *amici*'s members represent Indian successors to these allotments either through family member estates or through purchase. Other *amici* members are non-Indian purchasers of allotted lands.

[7] As used herein the word "ceded" represents those lands ceded under an Indian treaty or with respect to the Klamath Indian Tribe, it also refers to the lands covered under the 1901 Cessions Agreement (ratified by Congress Act of June 21, 1906, ch. 3504, 34 Stat. 325, 367). *See ODFW*, 473 U.S. at 760-61.

[8] The Klamath Termination Act (68 Stat. 718) allowed each adult member of the Klamath Tribe an opportunity to withdraw from or remain in the tribe. Once a member withdrew they were entitled to a share of the tribal assets, with former reservation lands to be sold to provide the funds sufficient to pay the withdrawing members. The lands sold are referenced herein as the lands "sold by the tribe."

owned by the tribe, for two primary reasons. First, the Court should hold that such implied servitudes do not exist because they are not expressly reserved in the applicable treaties and they are not supported by any *implied* reserved right doctrine endorsed by this Court. Second, the Court should hold that recognition of such a servitude is inconsistent with other purposes expressed in the applicable treaties and subsequent Congressional actions and policies. Alternatively, even if the Court were to find that an environmental servitude may be implied as a component of non-exclusive treaty fishing rights, the Court should hold that equitable defenses are available to litigants like the State of Washington and *amici*, to limit the remedies available to the United States when seeking to establish and enforce treaty rights on behalf of Indian tribes.

ARGUMENT

A. There is No Legal or Historical Basis for Implying an Environmental Servitude on Former Tribal Lands.

The panel below conceived of the claimed right of an environmental servitude over ceded lands as an implied subcomponent of the expressly reserved non-exclusive Treaty right to *access* and *harvest* fish. It is not. The claimed implied environmental servitude over ceded or sold lands cannot be legally, or logically, implied from the express right to access and harvest fish. In order for such an intrusive encumbrance to exist over the millions of acres the various tribes ceded,

allotted or sold, the servitude had to of been expressly reserved. This Court's precedents preclude the creation of rights or servitudes that are not reserved by an Indian tribe in a cession or sale of land. *ODFW*, 473 U.S. at 768-69. Accordingly, this Court should reverse the decision below and hold that non-exclusive treaty-reserved fishing rights do not carry with them the distinct right for an environmental servitude, bearing similarities to a conservation easement, over lands the Tribes ceded or sold, or are otherwise no longer part of a tribal land reservation.

The panel's decision rests on a misguided understanding and application of this Court's federal reserved water right doctrine. Relying on its own decision in *Adair II* and this Court's decision in *Winters*, the panel found that it was appropriate to "infer" a promise that the State of Washington would not unduly impair fish habitat in order to "support the purpose" of the Stevens Treaties. Pet. App. 93a-94a (citations omitted). The federal reserved water right doctrine however lends no support to the panel's implication of such an environmental servitude.

The federal reserved water right doctrine rests on this Court's rare, and carefully-reached, *assumption* that Congress intends to reserve the amount of water necessary to fulfill the primary purpose of a federal land reservation. *United States v. New Mexico*, 438 U.S. 696, 702 (1978) ("Where water is necessary to fulfill the very purposes for which a federal reservation was created, it is reasonable to conclude, even in the face of Congress' express deference to state water law in other

areas, that the United States intended to reserve the necessary water."). As water rights in the Western United States are traditionally appurtenant to land, this assumption of Congressional intent makes sense when Congress reserves a tract of land for a primary purpose that necessarily requires water for its fulfillment. *See, e.g.*, *Winters*, 207 U.S. at 577; *Arizona v. California*, 373 U.S. 546, 596-601 (1963) (*Arizona*); *Cappaert v. United States*, 426 U.S. 128, 143-46 (1976) (*Cappaert*).

In *Winters*, *Arizona* and *Cappaert*, the implied water rights were applied to lands that were part of a federal reservation, upon which appurtenant rights could legally, and logically, attach. For example, *Winters* recognized treaty agricultural water rights necessary to achieve the agricultural purposes of the Fort Belknap Indian Reservation; *Arizona* recognized that agricultural water rights were essential and appurtenant to Indian Reservations; and *Cappaert* recognized a right to maintain the level of a pool within a National Monument. None of these cases are relevant to the claimed right of an implied environmental servitude over lands that are neither owned by an Indian tribe, nor presently reserved for a tribal purpose by the United States.

Unlike the legal and historical foundations that underlie this Court's reserved water right doctrine, there is no support in the context or history of the Stevens Treaties to assume that the parties intended to encumber ceded, allotted or sold lands with an environmental servitude for the propagation of fish. Indeed,

at the time of the treaties, it is unlikely that such a construct would have even been legally-cognizable – much less in the contemplation of the parties.[9] Thus, in the absence of the express reservation of such a servitude, there is no basis to judicially imply one, *ad hoc*, over lands ceded or sold by an Indian tribe. *See ODFW*, 473 U.S. at 766-67, 769-70.

That the Ninth Circuit veered off on a tangent grounded in this Court's federal reserved water right doctrine is, unfortunately, not surprising due to its misguided decision in *Adair II*. While the dissenting opinion in the Ninth Circuit's denial of *en banc* review in the present case regarded *Adair II* to be "unremarkable" in holding that the Klamath Tribes were entitled to water rights "on their reservation[,]" in fact that is not what the Ninth Circuit held at all. Pet. App. 26a. At the time *Adair II* was decided, the Klamath Tribes had no reservation. Rather, 25% of the reservation had been allotted and subsequently transferred to Klamath Indians and non-Indians alike, to be used for irrigated agriculture. Most of the remaining lands were subsequently purchased by the United States from the tribes for inclusion into a national wildlife refuge and a national forest. *Adair II*, 723 F.2d at

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[9] The legal construct advanced by the United States and Tribes in this case might be legally-cognizable as a conservation easement today. However, the Uniform Conservation Easement Act, which has been adopted by approximately half the states, was not drafted until 1981. *See* Burnett, King, The Uniform Conservation Easement Act: Reflections of a Member of the Drafting Committee, 2013 Utah L. Rev. 773. Such a legal construct would not have been legally-cognizable at the time of the Stevens Treaties.

1419. Given there was no tribal reservation at the time of the *Adair II* decision, the Ninth Circuit did not imply a water right attached an Indian reservation. Rather, the court described the Klamath Tribes' implied water rights to support their hunting and fishing rights to be "virtually unique" because the court found that the rights arose from the Tribes' non-exclusive hunting and fishing rights themselves as opposed to being attached to the tribes' ownership of land or a Congressional land reservation. *Id.* at 1418 n.31.

The Ninth Circuit found it inconsequential that Congress terminated the Klamath Tribes' reservation and purchased it for a national forest and wildlife refuge because the court had previously found, in *Kimball I*, that the Tribes' treaty fishing and hunting rights nevertheless persisted as non-exclusive rights, in common with other citizens, over those former reservation lands. *Kimball I*, 493 F.2d at 569. Thus, presumably because the Ninth Circuit's *Kimball* decisions construed the Stevens Treaty-Tribes' non-exclusive fishing rights to be analogous with those of the Klamath Tribes, the panel below found no impediment in its caselaw to finding that the Stevens Treaties implied reserved environmental servitudes over lands ceded in the Stevens Treaties. In *Adair II*, the Ninth Circuit found that the Klamath Tribes' "hunting and fishing rights carry with them an implied reservation of water rights" that were "virtually unique," and which allowed them "to prevent other appropriators from depleting the streams" where it is necessary to protect the tribes' "current exercise" of treaty fishing rights. *Adair II*, 723

F.2d at 1408, 1414-15 & n.31. Similarly, in the decision below, the Ninth Circuit found that the Stevens Treaties tribes' fishing rights carry with them an implied right to prevent the State of Washington from blocking fish habitat with culverts to support the tribes' treaty fishing rights.[10]

Both the decision below, and *Adair II*, reflect a view held by the Ninth Circuit that this Court's federal reserved water right doctrine permits courts to infer implied servitudes over ceded, allotted or sold lands when the servitudes may be construed as being supportive of non-exclusive treaty fishing rights. This Court should reject the Ninth Circuit's reasoning, expressed in *Adair II* and then extended further in the decision below, because such rights are neither supported by the treaties nor this Court's precedents. The Court should hold that such environmental servitudes are simply not encompassed within the non-exclusive treaty fishing rights held by the various tribes over lands the tribes ceded or sold.

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[10] Indeed, in *Adair II*, the Ninth Circuit foreshadowed future litigation regarding environmental servitudes for the support of non-exclusive treaty fishing rights, commenting: "[f]or a thoughtful argument that this case *understates* the scope of tribal reservations by treaty of an interest in an environmentally sensitive resource, see Comment, *Indian Fishing Rights Return to Spawn: Toward Environmental Protection of Treaty Fisheries*, 61 Ore. L. Rev. 93 (1981)." *Adair II*, 723 F.2d at 1415 n.23 (emphasis added). In other words, in *Adair II*, the Ninth Circuit was aware of the environmental servitude concept but rejected the broad view of implying environmental servitudes, yet, in this case, seemingly embraced such an approach.

This Court's precedents are clear that the Stevens Treaties' tribes' non-exclusive fishing rights encompass a special *right to access* usual and accustomed places and a special *right to harvest* fish free of state regulation as to methods and limits, except as necessary for conservation. The express treaty right to fish is, fundamentally, about harvesting fish free of state regulation; the right is not, under any rational conception or interpretation, concerned with restricting state and private use or development of ceded or sold lands or lands that are reserved for other, non-tribal purposes. The claimed right of an environmental servitude implicates private property rights and the state's traditional role over a vast array of policy areas, including land use and the development of infrastructure as basic as the roads at issue in this case. The Court should hold that an environmental servitude is not an implied component of the kind of non-exclusive treaty rights to access and harvest fish that are at issue in this case.

B. Implication of an Environmental Servitude Improperly Rewrites the Balance of Purposes Expressed in the Various Indian Treaties.

This Court has long recognized that treaties with the various Indian tribes are to be interpreted in a manner that would be consistent with reservation of the land for the use of the tribe. As such, the treaties carry with them a promise that the United States would support the various purposes of the treaties and not single out one purpose to the injury of the others.

Accordingly, even if the Court were to consider implying an environmental servitude to fulfill the fisheries purpose of the Stevens Treaties, that implied servitude would run afoul of the text and historical context of the treaties; as well as Congress' subsequent revisions, by elevating the fisheries purposes over other primary treaty purposes. The Ninth Circuit adopted a singular fisheries'-centric focus over all other treaty purposes. By narrowly focusing on the Stevens Treaty tribes' non-exclusive fishing rights, the court thereby ignored the other treaty purposes – *e.g.*, removing tribal encumbrances on the ceded lands and, in many cases, the adoption of an agrarian lifestyle.[11] The Court failed to

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[11] It is likely that one of the reasons the Ninth Circuit frequently ignores competing primary treaty purposes is because of this Court's decision in *Winans*, *supra*. *Winans* suggested that, because the off-reservation fishing right "secured" in the Stevens Treaties was a "reservation of [rights] not granted[,]" the tribes' rights were be construed as being essentially a retained aboriginal right. Relying on *Winans* in *Adair II*, the Ninth Circuit found that the implied water rights supporting the Klamath Tribes' hunting and fishing rights was, therefore, entitled to a "time immemorial" priority date, elevating it above the primary purpose expressed in the Klamath Treaty of developing agriculture, which the Ninth Circuit found was entitled to an 1864 priority date, based on the date of the Klamath Treaty. *Adair II*, 723 F.2d at 1412-14. The Ninth Circuit did so despite the fact that the Klamath Treaty provided: "the following-described tract, *within the country ceded by this treaty*, shall, until otherwise directed by the President of the United States, *be set apart as a residence* for said Indians, [and] held and *regarded as an Indian Reservation*." 16 Stat. 707 (emphasis added). Similarly, the Stevens Treaties provide that the "right of taking fish . . . *is further secured to* said Indians *in common with all citizens* of the Territory." *See* 10 Stat. 1132. In both cases, however, the plain text indicates that rights established for the tribes were, in fact, granted by the United

give meaning and effect to such other treaty purposes and in doing so likewise failed to adopt a sensible construction that avoids the absurd result that negated other equally important treaty purposes. *See South Dakota v. Yankton Sioux Tribe*, 522 U.S. 329, 345-46 (1998) (*Yankton*).

In *Washington*, the Ninth Circuit opined that even if the treaty did not expressly promise that the treaties would secure an adequate supply of fish forever, it would infer such a promise. Pet. App. 93a. From that inferred promise, it then extrapolated into the treaties an implied environmental servitude to achieve an undefined and open-ended quantity of fish.

In doing so, the Ninth Circuit effectively amended away the treaty provision wherein the tribes "cede, relinquish, and convey . . . of all their right, title and interest in and to the lands . . . " It further rewrote the treaty by retroactively imposing an implied environmental servitude burden and a restoration requirement over these same ceded lands.

As a foundation for inferring both the promise and the environmental servitude, the court relied upon *Winters*, wherein in the face of silence in the treaty which created the Fort Belknap Reservation, this Court inferred a reservation for water sufficient to

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States following the *complete* cession of land, and the *complete* extinguishment of aboriginal title. However, this Court has previously clarified that the rights in *Winans* are to be construed in the tenor of all the purposes of the treaty. *Northwestern Bands of Shoshone Indians v. United States*, 324 U.S. 335, 353 n.16 (1945).

support the treaty's agricultural purposes. *Winters*, 207 U.S. at 576.

Since *Winters*, this Court has recognized that a federal reservation of land carries with it the right to use water as necessary to serve the reservation's purposes. However, this Court has also recognized that the federal right, "reserves only that amount of water necessary to fulfill the purpose of the reservation, no more." *New Mexico*, 438 U.S. at 700.

Winters has long been the standard upon which tribal reserved water rights were implied to support tribal purposes. However, seldom have the courts been faced with choosing between treaty purposes as is presented in the current case. In the present case the Ninth Circuit not only inferred a promise of an environmental servitude to support fisheries over other purposes, it also inferred a promise that the number of fish and game would always be plentiful enough to meet the Washington tribes' fishery harvest aspirations. Pet. App. 94a.

The conflict is not in the treaty language but in the failure to even attempt to strike a balance in how multiple co-equal treaty purposes are to be achieved. The Ninth Circuit simply chose to ignore the other essential purposes expressed in the treaties. Further, it ignored that, subsequent to the treaties, Congress expressly modified the treaties through allotment policies, agricultural development, and termination. The Ninth Circuit's rewrite of the treaties serves to impugn the Congressional intent underlying the subsequent

cession, allotments, developments, and the sale or termination of reservation lands. *See ODFW*, 473 U.S. at 720; *Brendale v. Yakima* 492 U.S. 408, 422-24 (1989) (*Brendale*); *Yankton*,[12] 522 U.S. at 345-47 (1998). The concept of an implied habitat protection servitude over ceded or allotted lands ignores, and effectively interferes with, the attainment of the agricultural purposes, as well as the other essential purposes expressed in the treaties.

As this Court recognized in *Fishing Vessel*, "it simply was not contemplated that either party [to the Treaty] would interfere with the other's fishing rights. The parties accordingly did not see the need, and did not intend, to regulate the taking of fish by either Indians or non-Indians, nor was future regulation foreseen." *Fishing Vessel*, 443 U.S. at 668. Although the Court was referring to conflict between Indian and non-Indian fishing rights, the statement is equally applicable to conflicts between Indian fishing rights and post-treaty settlement and development, water use, and a host of other potential land use and natural resource conflicts across the lands ceded by the tribes through treaties. In other words, the parties similarly never intended one purpose would negate or diminish the other expressed purpose.

Though poorly defined, the Ninth Circuit's construction of the Stevens Treaties threatens to establish

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[12] For example, in the Cessions Agreement Congress expressly approved development of irrigation and drainage project. (Cessions Agreement 34 Stat. at 368), actions inconsistent with the approach the Ninth Circuit has taken in the present case.

a precedence for *de facto* conservation or environmental easements over streams capable of supporting tribal fisheries. It has the potential to be extrapolated to any treaty reserving a right to hunt, fish or gather. The court's construction is not only potentially far-reaching, it is also in contravention of this Court's prior decisions in *ODFW*, *Brendale*, and *Yankton*. While these cases involved treaties other than a Stevens Treaty, it illustrates the far-reaching conflicts the Ninth Circuit's language creates with the other treaties.

In *ODFW* this Court held that when tribal land is sold or ceded in a "general conveyance" the conveyance unquestionably carries with it all appurtenant fishing rights. *Id.* at 766. *See Mille Lacs*, 526 U.S. at 201-02 (the 1864 Treaty provided the Tribe the exclusive right of taking fish in the streams and lakes, included in the reservation . . . that right could not consistently survive off the reservation on the lands the Tribe had sold) (*see also Klamath and Modoc Tribes v. U.S.*, 436 F.2d 1008, 1020 (1971)) (sales of tribal lands were not encumbered by any restrictions).

Of particular relevance to the *amici*, is that contemporaneously with the Klamath Termination Act, and in preparation for sale of tribal lands the Interior Department Solicitor addressed the same issue – the impact of cession or sale on the treaty fishing rights – and likewise concluded that:

> "the fishing rights of the members do not continue with respect to land which are sold

> because such sold land is no longer retained tribal land or a part of the Indian reservation. The Klamath Tribe was given only exclusive fishing rights within the reservation. In the opinion of this office, it is considered that it was the intent of Congress that the land which is sold should be conveyed in fee simple and not be impressed with an encumbrance in the nature of fishing rights in favor of remaining tribal members."

Opinion of Solicitor May 20, 1955 (62 I.D. 186, 201-202 M-36284, pp. 1651, 1677)) (http://thorpe.ou.edu/sol_opinions/p1651-1675.html and http://thorpe.ou.edu/sol_opinions/p1676-1700.html) (last accessed 1-20-18). (Solicitor Opinion).[13]

In other words, lands that were allotted to a tribal member or, otherwise sold or ceded by an Indian tribe were divested at termination free and clear of any appurtenant fisheries rights, restrictions, servitudes or

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[13] The canons of construction applicable in Indian law provide that statutes are to be construed liberally in favor of Indians, and that ambiguous provisions interpreted to their benefit, *Montana v. Blackfeet Tribe*, 471 U.S. 759, 766 (1985). However, these general canons do not survive in the face of clear Congressional intent to the contrary. *Rosebud Sioux Tribe*, 430 U.S. 584, 587 (1977). In administering the Klamath Termination Act, the Solicitor's opinion as to the interpretation of the legislation is also subject to the canon that deference be afforded under *Chevron v. Natural Resources Defense Council*, 467 U.S. 837, 842-45, 104 S. Ct. 2778, 81 L. Ed. 2d 694 (1984). While the canons may intersect, in at least the Ninth Circuit the courts have held that the liberal construction canon must give way to agency interpretations of a statute that deserve *Chevron* deference. *Williams v. Babbitt*, 115 F.3d 657, 663 n.5 (9th Cir. 1997).

encumbrances unless expressly reserved. Yet, notwithstanding this Court's clear precedence in *ODFW*, and the Interior Department's understanding at the time of the sale of the former reservation under the Klamath Termination Act, the Ninth Circuit's decision below threatens to impose over these same ceded or sold lands an implied environmental servitude. A view that runs counter to the plain language and historical context such that it would eviscerate Congressional express purposes in the ceding, allotment and sale of the lands. *See Yankton*, 450 U.S. at 346.

As noted earlier, this Court has previously ruled that when an Indian tribe cedes lands, it does so free of all encumbrances except those expressly reserved. In *ODFW*, this Court explained that:

> The Treaty language that ceded that entire tract . . . stated only that the Tribe ceded "all their right, title, and claim" to the described area. Yet that general conveyance unquestionably carried with it whatever special hunting and fishing rights the Indians had previously possessed in over 20 million acres outside the reservation. Presumptively, the similar language used in the 1901 Cessions Agreement should have the same effect.

ODFW, 473 U.S. at 766.

While in *ODFW*, this Court acknowledged that the language ceding lands in the 1901 Cessions Agreement was somewhat analogous to the off-reservation right "of taking fish at all usual and accustomed places, in common with citizens of the Territory" (*Id.* at n.15) that is found in the treaties addressed in *Puyallup*, it

nonetheless found that with respect to the ceded lands that the fishing rights did not survive on the ceded lands after the cession. *ODFW*, 473 U.S. at 769-70.

However, in the present case the Ninth Circuit implied from the Stevens Treaties' off-reservation rights to access and fish at usual and accustomed fishing places, an additional environmental servitude applicable from the mouth to the headwaters of every stream that supports or contributes to the support of anadromous Columbia River fish – whether on or off reservation – is to impose a servitude on ceded, as well as allotted or tribal sold lands, in a manner that conflicts with prior Supreme Court precedence.

The Ninth Circuit has retroactively imposed a potentially far-reaching encumbrance that is counter to the express cessions within the treaties; injures one or more of the primary purposes within the treaties; creates a conflict with past Congressional actions; and conflicts with the rulings of this Court. The reach of the Ninth Circuit's opinion touches on not just the State of Washington's road culverts, rather it extends to all lands and activities within the Columbia River Basin including all private, tribal and public land activities on ceded lands, allotted lands, and current and former reservation lands.

The courts need to be mindful and consider all the treaty purposes in total in determining what, if any, implied rights should be imputed. When that principle is applied here, it is clear that the parties to the treaties could not have been intended or contemplated

such a far-reaching servitude. It threatens to subject any land use activity sanctioned by the State of Washington, or for that matter a private party, that might potentially affect fish populations, to claims for violation of the tribes' treaty rights. *Amici* urge the Court to reject the Ninth Circuit's far-reaching and retroactive rewriting of the various treaties.

C. The Ninth Circuit's Decision Frustrates Justifiable Expectations on Former Tribal Lands.

This case presents an important question regarding the application of equitable defenses when parties such as the State of Washington and *amici* are subjected to claims by the United States seeking to establish tribal rights over former tribal lands. Frequently, in such litigation, the United States seeks refuge in Ninth Circuit precedents broadly stating that "laches or estoppel is not available to defeat Indian treaty rights." *Swim v. Bergland*, 696 F.2d 712, 718 (9th Cir. 1983). The Court should overrule this line of Ninth Circuit precedent and hold that the *remedies available* to the United States and/or tribes to enforce treaty rights may be limited by equitable defenses. *See* Brf. of Pet. at 29, 47.

Like the State of Washington, *amici* have been treated extraordinarily unfairly by the federal government, in its prosecution of litigation seeking to enforce treaty obligations to the detriment of *amici* and its members. As explained *supra*, the United States allotted former Klamath reservation lands for agricultural

purposes to the various tribal members in order to achieve the agricultural development goals of the treaty, as well as in fulfillment of the General Allotment Act. Over time, the United States, as trustee of the tribes, then authorized sale of many of those allotments to non-Indians such as *amici* and their members, or their predecessors. Congress furthered those policies by authorizing irrigation projects (*e.g.*, Modoc Point Unit, Sand Creek Unit, Agency Unit and Spring Creek Unit) that are now owned by *amici* and their members. For the federal government to now seek to destroy the productivity and value of those agrarian lands and irrigation projects, by denying them water in an attempt to benefit the non-exclusive tribal fishing rights, is inequitable and unfair.

As reflected in the Interior Solicitor memos discussed herein and in *amici*'s brief in support of certiorari, the federal government further promoted *amici* and their predecessors to rely on the federal government's support for keeping previously allotted lands in productive use. *See* Modoc Cert. Brf. at 17-18, 23. The federal government expressly promised it would support those lands having water rights under the authority of the Klamath Treaty. Nevertheless, like the State of Washington, *amici* have heretofore been expressly precluded in the Klamath Water Adjudication from raising equitable defenses to limit the remedies available to the United States to fulfill the federal government's trust obligations to the Klamath Tribes on the exact same basis as the State of Washington was prohibited in this case.

The Ninth Circuit's imposition of an environmental habitat servitude and restoration requirement on agrarian developments involving former Reservation lands or on developments on ceded lands is exactly the disrupting type of action that this Court sought to avoid in *City of Sherrill,* and to which it applied an equitable balance. *City of Sherrill v. Oneida Indian Nation of New York*, 544 U.S. 197, 221 (2005).

The Court should hold that equitable defenses are available in cases of this nature, where the federal government seeks to have courts recognize and enforce novel implied treaty rights on behalf of Indian tribes that disrupt long-held, justifiable expectations concerning issues such as land use and private property rights.

CONCLUSION

The Ninth Circuit improperly implied an environmental servitude over lands long ago ceded by the various tribes. In doing so it adopted a singular focus on one of the treaty's purposes to the injury of those who relied upon the other treaty purposes and is counter to the subsequent rulings by this Court as well as

subsequent Congressional enactments. The Court should reverse the decision of the Ninth Circuit below.

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March, 2018.

No. 17-269

In the Supreme Court of the United States

STATE OF WASHINGTON,
Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.,
Respondents.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

BRIEF *AMICI CURIAE* OF THE NATIONAL CONGRESS OF AMERICAN INDIANS, THE NAVAJO NATION, THE UTE MOUNTAIN UTE TRIBE, AND THE CONFEDERATED SALISH AND KOOTENAI TRIBES IN SUPPORT OF RESPONDENT

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INTERESTS OF THE *AMICI CURIAE*[1]

Founded in 1944, the National Congress of American Indians ("NCAI") is the nation's oldest and largest association of Native American and Alaska Native tribal governments, representing hundreds of federally recognized Indian tribes and many individuals. NCAI serves as a forum for consensus-based policy development among its member tribes from every region of the country. Its mission is to inform and educate the public, the federal government, and state governments about treaty rights, tribal self-government, and a broad range of public policy issues affecting Native nations, tribes and pueblos.

The Navajo Nation (the "Nation") is the largest Indian nation in the United States by land holdings. Spanning 17 million acres in Arizona, New Mexico and Utah, the Nation is larger than 10 states and roughly the size of West Virginia, and is home to more than 300,000 enrolled members. As a sovereign government, the Nation entered into two ratified treaties with the United States, in 1850 and 1868, respectively.

The Ute Mountain Ute Tribe ("UMUT") is a federally recognized Indian tribe whose reservation encompasses lands in Colorado, New Mexico and Utah, totaling approximately 600,000 acres – nearly the size of Rhode Island. UMUT is a successor to the 1868 Treaty with the Tabeguache, Muache, Capote,

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[1] This brief was not authored in whole or part by counsel for a party. No one other than amicus curiae made a monetary contribution to preparation or submission of this brief. All parties have consented to the filing of this brief.

Weenuche (also Weeminuche), Yampa, Grand River and Uintah bands of Ute Indians, 15 Stat. 619.

The Confederated Salish and Kootenai Tribes ("CSKT") are a federally recognized tribe governed pursuant to the Indian Reorganization Act of 1934, 48 Stat. 984 (25 U.S.C. § 461, et seq. (transferred to 25 U.S.C. §5101 et seq.)) with a 10-member council operating under a Constitution and By-Laws adopted in accordance with § 16 of that Act. On July 16, 1855, the Salish and Kootenai nations and the United States entered into the Hellgate Treaty, 12 Stat. 975, wherein the CSKT reserved to themselves a permanent homeland of approximately 1.3 million acres on what is now the Flathead Indian Reservation, located in northwest Montana.

Respondent Tribes in this case have been confronted with an aggressive invocation of equitable principles aimed at extinguishing their fundamental rights – here the notion that mid-level federal bureaucrats with no responsibility for treaty rights could be deemed to have waived those rights through actions involving no consideration of them. So too are tribes across the country having to deal with increasingly bold and far-ranging assertions that virtually any form of tribal right can be defeated by broad reference to equity, in a way that is entirely inconsistent with fundamental principles of federal Indian law.

Amici respectfully offer this brief because treaties reflect solemn commitments between sovereigns. They are entered into based upon mutual respect and the shared understanding that each party has a right to self-governance and self-determination, and

are negotiated to serve the best interests of their people and the public policies of each sovereign.

SUMMARY OF THE ARGUMENT

Much of this litigation has understandably focused on the proper interpretation of the Treaty of Medicine Creek, U.S.-Nisqually, art. III, Dec. 26, 1854, 10 Stat. 1133 and other treaties at issue in this case ("Stevens Treaties"). What sets this case apart, however, is the State's assertion that the usual protections provided to the United States as a litigant do not apply when the United States acts as a trustee for Indian tribes. The State of Washington (the "State") cites no authority for departing from the Court's longstanding principle that the doctrines of waiver, estoppel and laches presumptively do not apply to the United States when it is enforcing federal law. That principle should be applied with *greater*, not lesser, strength when the United States is enforcing treaties solemnly entered with tribal governments.

Unlike many other areas of federal law, where the executive is vested with substantial discretion in applying and enforcing the law in the public interest, this Court recognizes a treaty as a contractual obligation that the United States may not abrogate without a clear expression of intent from Congress. *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 202 (1999); *Choctaw Nation of Indians v. United States*, 318 U.S. 423, 431-322 (1943).

From the earliest days of this republic, Indian tribes have relied on the United States, acting as their trustee, to assert and protect their treaty and other statutory rights against encroachment by state

governments. *See, e.g., United States v. Kagama*, 118 U.S. 375, 384 (1886) (upholding Congress' assertion of federal criminal jurisdiction under the Major Crimes Act, 48th Cong., 2d Sess., 16 Cong. Rec. 934 (1885)). Tribal-state relations have improved immeasurably since *Kagama* and other early decisions of this Court. Yet Indian tribes are still barred by sovereign immunity from asserting their claims for treaty violations directly against a state without the assistance of the United States government. *See* Opening Brief at 45 ("Had the State prevailed as to those defenses, the case would have ended, because the Tribes would have been unable to overcome the State's sovereign immunity without the United States."). Although tribes must often rely on the initiative of the United States to enforce treaty rights, the equitable defenses – including waiver, estoppel and laches – typically are unavailable when states are litigating against the United States. *Heckler v. Cmty. Health Servs. of Crawford Cty., Inc.*, 467 U.S. 51, 63 (1984).

The State would upset this balance. Citing *City of Sherrill v. Oneida Indian Nation of N.Y.*, 544 U.S. 197 (2005), the State proposes an exception: When the United States acts as trustee for Indian tribes, then states can broadly invoke a full suite of equitable defenses against the United States government. Opening Brief at 44-45. Such a sweeping exception is not supported by *City of Sherrill*.

More specifically, the State takes the position that the federal government may waive treaty rights, or be estopped from asserting them, simply by promulgating nationwide federal regulations and guidance on road construction without reference to local

or regional treaty obligations. This Court rejected that position in *Cramer v. United States*, 261 U.S. 219, 234 (1923), where federal agents who issued a lease of Indian land without authority could not waive the right of the United States to bring an action subsequently to protect the Indians' rights. There is similarly no claim that Respondents waived or failed to assert their treaty rights in this case. *See* Opening Brief 45-52 ("The State Should Be Allowed to Raise Equitable Defenses Against the *Federal Government*")(emphasis added).

Taking the State's argument to its logical conclusion, if the advent of federal statutory or regulatory activity on a national scale constituted equitable waiver in and of itself, the United States might never be able to assert a treaty violation on behalf of an Indian tribe. The State does not explain how this squares with Congressional power over Indian affairs. That is to say, the power to abrogate (or "waive") Indian treaties is vested exclusively with Congress and then only in express and unequivocal terms. *Mille Lacs Band of Chippewa Indians*, 526 U.S. at 202. Assuming *City of Sherrill* even applies here, neither it nor this Court's subsequent cases question, let alone challenge, Congressional primacy in matters regarding Indian tribes, such as determining the proper balance to strike when state actions adversely affect tribes' treaty rights.

Asserting a laches defense against the United States likewise draws no support from *City of Sherrill*. Judge O'Scannlain's suggestion that this case may be barred by laches, Pet. App. 33a (O'Scannlain, J., statement regarding denial of rehearing *en banc*), is a bridge too far. The defense of laches was never

raised below, and it is not supported by any findings of fact in the record. References to "nineteenth century" treaties notwithstanding, Pet. App. 18a (O'Scannlain, J., statement regarding rehearing *en banc*), no litigant has set forth the actual elements of laches and related them to the findings of fact in the record – many of which deal with current events, *see, e.g.*, Pet. App. 141a, ¶¶ 3.55-3.64; Pet. App. 145a, ¶ 3.79; Pet. App. 157a-58a, ¶¶ 7-8; Pet. App. 162a-64a, ¶¶ 28-29.

To apply laches to this situation would be to adopt a rule without applying even normal standards of pleading and proof, much less the heightened standard normally applied when invoking laches against the United States. There is nothing in *City of Sherrill*, or any ordinary principle of law, that would support such a conclusion.

ARGUMENT

In *City of Sherrill* this Court held that equitable doctrines barred a tribe's assertion of sovereign authority over land purchased on the open market and subject to state and local authority for two centuries. 544 U.S. 197.[2] The State would bootstrap *City of Sherrill* – a case in which the United States was not a party – to prevent the federal government from litigating on behalf of tribal treaty claims. This would allow states to assert equitable defenses against the federal government, and abrogate the time-honored rule that waiver will not be applied

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[2] *City of Sherrill* applied laches, acquiescence and impossibility. By contrast, the equitable doctrines raised by the State in this case are waiver and estoppel.

against the United States on the basis of ordinary governmental activity by federal officials, *see Heckler*, 467 U.S. at 63. Even assuming *City of Sherrill* applies, reading it as the State insists here would compromise the United States' statutory obligations as trustee under the Stevens Treaties while casting doubt on many others.

I. WHEN THE UNITED STATES ACTS AS TRUSTEE FOR INDIAN TRIBES, IT ENJOYS ALL THE ORDINARY PROTECTIONS OF THE GOVERNMENT ACTING IN THE PUBLIC INTEREST, AND *CITY OF SHERRILL* DID NOT CHANGE THIS.

A. Tribes must rely on the United States, as trustee, to protect their rights.

Historically the United States, acting as trustee for Indian tribes, was primarily responsible for bringing a legal action when tribal rights were infringed. *Cayuga Indian Nation of New York, by Patterson v. Cuomo*, 565 F. Supp. 1297, 1326 (N.D.N.Y. 1983)("[D]uring the nation's early history lawsuits by tribes were rare.")(citing Clinton & Hotopp, *Judicial Enforcement of the Federal Restraints on Alienation of Indian Land: The Origins of the Eastern Land Claims*, 31 ME. L. REV. 17, 46 (1978)); *Oneida Indian Nation of New York v. State of N.Y.*, 691 F.2d 1070, 1081–82 (2d Cir. 1982)("Pursuant to its obligations as trustee to Indian tribes to bring suits on their behalf, the Executive Branch through the Interior and Justice Departments has been active in processing and

litigating the thousands of claims submitted by Indian tribes.").

The federal role as trustee for Indian tribes was intended to provide a crucial protection against state governments whose interests frequently conflicted with those of tribes. "In carrying out its treaty obligations with the Indian tribes the Government is something more than a mere contracting party[;] ... it has charged itself with moral obligations of the highest responsibility and trust." *Seminole Nation v. United States*, 316 U.S. 286, 296 (1942).

Despite tribal capacity-building in recent years, along with greatly improved state-tribal relations, this case demonstrates the continuing importance of the federal government's trusteeship obligations. Part of this stems from the Constitutional architecture: Tribes may not sue state governments directly under the Eleventh Amendment without states' consent. *Idaho v. Coeur d'Alene Tribe of Idaho*, 521 U.S. 261, 268–69 (1997). Accordingly, tribal governments must often rely on the United States to bring suit to protect their rights against state encroachment. *See, e.g., U.S. on Behalf of Cheyenne River Sioux Tribe v. South Dakota*, 105 F.3d 1552, 1560 (8th Cir. 1997); *U.S. ex rel. Cheyenne River Sioux v. S. Dakota*, 102 F. Supp. 2d 1166, 1171–72 (D.S.D. 2000)(contesting the application of state taxes).[3]

The State suggests that whenever the federal government "partners" with a state, or regulates or

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[3] Prospective injunctive under *ex parte Young* was not available in those cases because the relief sought included reimbursement of taxes paid. *See Cheyenne River*, 105 F.3d at 1170.

provides guidance for certain aspects of highway construction, the United States should be estopped from bringing any subsequent actions on behalf of an Indian tribe, even when the federal officials involved acted without knowledge or regard for tribal rights as explicitly protected by treaties and other statutes. Opening Brief at 46; Brief of Idaho, *et al*, at 24.[4] This approach would have the practical effect of exempting from federal enforcement any tribal right that relates to federal regulation or policy. Because it is not clear how much federal involvement is necessary to create a "partnership" according to the State's approach, adopting it here could open the door more broadly as a defense against the United States' ability to litigate not only on behalf of tribal interests, but conceivably in many other areas, unrelated to federal Indian law, where a party might wish to raise waiver against the United States.

From a tribal perspective, carving out a categorical exception to the time-tested principles of equity whenever the United States acts as trustee for tribes and their members, presents practical difficulties and very real hardship. Tribes already must compete with a vast array of non-Indian interests when it comes to accessing the federal government's litiga-

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[4] Idaho, *et al*, characterizes this relationship as a "partnership." Brief of Idaho, et al. at 24. The argument that the United States' role in encouragement and design of state highways was so pervasive that it should be held responsible for their consequences, taken to logical conclusion, suggests that the United States is also responsible for routine torts and other causes of action arising from the existence and design of these highways. A permittee is clearly in a much different position than a "partner."

tion resources. And tribal interests will always be just one component of the broader public interest standard that Congress and the executive branch must consider in formulating, implementing and enforcing national public policy. Adding an ambiguous equitable defense to the equation would further degrade the federal government's ability to protect tribal rights.

The State characterizes the activities of the federal government as "encouraging Washington's highway construction, directing the State's culvert design, and issuing permits for the culverts." Opening Brief at 51. There is no allegation that the issue of treaty rights was ever raised or addressed during this permitting process, and therefore the district court made no findings of fact that would support such a claim.

Yet the State and its supporters still take the position that by merely encouraging highway construction, the United States waives its right to object whenever a state builds a highway in violation of a treaty or other applicable federal laws. "[The Washington State Department of Transportation] adhered to hydraulic culvert designs published by the FHWA as a condition of federal funding until Washington itself developed design methods that improved upon the federal model." Brief of Idaho, *et al*, at 23. "Washington has also received [Clean Water Act] permits under 33 C.F.R. § 323 with respect to its culvert construction activities." *Id.* at 23-24.

Essentially, federal officials issued permits pursuant to two federal statutes and their accompanying regulations. This permitting process is no guarantee, or even an indicator, of compliance with any

other applicable federal laws. For instance, a permit under the Clean Water Act, 33 U.S.C. §1251 et seq. (1972)), does not demonstrate that the State complied with other federal laws or regulations, which could range from labor-contracting provisions and union requirements to workplace safety or many other matters within the United States' jurisdiction. Just as a Clean Water Act permit would not bar suit for entirely unrelated violations of federal law, it should not bar suit for treaty violations.

A continuing reality of federal Indian law, particularly given Congressional primacy in Indian affairs, is that the federal government, while acting as trustee for a tribe, sometimes encounters actual or perceived conflicts of interest or policy that would be impermissible in other trust or representative relationships. The United States, for example, has been permitted to bind a tribe to a water rights settlement – without the tribe's participation – when one of the other primary water claimants was the United States Bureau of Reclamation. *Nevada v. United States*, 463 U.S. 110, 134-35 (1983). But "the analogy of a faithless private fiduciary cannot be controlling for purposes of evaluating the authority of the United States to represent different interests." *Nevada*, 463 U.S. at 142.

As this Court recently observed, "the Government has often structured the trust relationship to pursue its own policy goals." *United States v. Jicarilla Apache Nation*, 564 U.S. 162, 175 (2011). This reflects the Court's longstanding deference to Congress and the executive branch. Even though such conflicts are permitted when the federal government acts formally as a trustee and a litigant, that is no

reason to assume the United States is acting as trustee, and waiving a known legal right on behalf of a tribe, whenever it performs its unrelated role in encouraging state highway construction.

The federal government routinely regulates, in the public interest, matters that are relevant to potential disputes between tribal and state governments, including roads and culverts, water quality (the Clean Water Act, 33 U.S.C. §1251 et seq. (1972)), pipelines (the Natural Gas Act, 15 U.S. Code § 717f). If compliance with distinct federal laws and regulations becomes a defense to litigation brought by the United States, the ability of the United States to safeguard tribal treaty rights would wither, along with other important statutory protections.

In practice, the State's proposed legal rule would make compliance with one or more unrelated federal laws a valid or at least plausible defense to allegations of treaty violations by state governments. This would be a sudden and dramatic reversal of the longstanding principle articulated by this Court that treaties, to which by definition states are not parties, must be construed liberally. *Choctaw Nation of Indians v. United States*, 318 U.S. 423, 431-322 (1943)(quotation omitted). "The canons of construction applicable in Indian law are rooted in the unique trust relationship between the United States and the Indians," *Oneida County v. Oneida Indian Nation*, 470 U.S. 226, 247 (1985), and "[a]mbiguities in federal law have been construed generously in order to comport with these traditional notions of sovereignty and with the federal policy of encouraging tribal independence," *White Mountain Apache Tribe v. Bracker*, 448 U.S. 136, 143–44 (1980). "When ...

faced with these two possible constructions, our choice between them must be dictated by a principle deeply rooted in this Court's Indian jurisprudence: '[S]tatutes are to be construed liberally in favor of the Indians, with ambiguous provisions interpreted to their benefit.' *Cty. of Yakima v. Confederated Tribes & Bands of Yakima Indian Nation*, 502 U.S. 251, 269 (1992), quoting *Montana v. Blackfeet Tribe*, 471 U.S. 759,766 (1985). "[T]he intention to abrogate or modify a treaty is not to be lightly imputed to the Congress," *Menominee Tribe of Indians v. United States*, 391 U.S. 404, 413 (1968) (quotation omitted).

B. Equitable defenses, such as waiver and estoppel, do not generally apply against the United States, and nothing in this Court's decision in *City of Sherrill* suggests otherwise.

When the United States brings suit, it acts not merely as a private litigant, but as a representative of the public interest. *Utah Power & Light Co. v. United States*, 243 U.S. 389, 409 (1917). As such, it is not generally subject to equitable defenses such as waiver. *Id.* ("As a general rule, laches or neglect of duty on the part of officers of the government is no defense to a suit by it to enforce a public right or protect a public interest.") "The general principles of equity are applicable in a suit by the United States . . . [b]ut they will not be applied to frustrate the purpose of its laws or to thwart public policy." *Pan–Am. Petroleum & Transp. Co. v. United States*, 273 U.S. 456, 506 (1927).

Defendants may not assert estoppel or waiver on the basis of statements by federal employees. *Heckler*, 467 U.S. at 63. "This is consistent with the

general rule that those who deal with the Government are expected to know the law and may not rely on the conduct of Government agents contrary to law." *Id.* Or as Justice Holmes observed, "[m]en must turn square corners when they deal with the Government." *Id.* (quoting *Rock Island, A. & L.R. Co. v. United States*, 254 U.S. 141, 143 (1920)). In bringing suit on behalf of a tribe, the United States both acts as a trustee and "assert[s] its own sovereign interest." *United States v. Jicarilla Apache Nation*, 564 U.S. 162, 176 (2011). It is acting in the public interest, not as a private litigant.

For example, in *Cramer* this Court found that the United States was not "estopped from maintaining [a] suit [on behalf of individual Indian landowners] by reason of any act or declaration of its officers or agents" because "these Indians with the implied consent of the government had acquired such rights of occupancy as entitled them to retain possession as against the defendants, no officer or agent of the government had authority to deal with the land upon any other theory." *Cramer*, 261 U.S. at 234.

Adhering to *Cramer*, the Ninth Circuit has traditionally held that equitable defenses are not available in cases involving Indian treaty rights. Decision Below, Pet. App. 97a-98a, quoting *United States v. Washington*, 157 F.3d 630, 649 (9th Cir. 1998) and *United States v. Ahtanum Irrigation Dist.*, 236 F.2d 321, 334 (9th Cir. 1956). Although acknowledging that this line of cases has been limited by *City of Sherrill*, the court found it has not been overruled. *Id.* at 98a.

States usually apply the very same principle in their own courts in cases involving state governmen-

tal activity. *See, e.g., Matter of Hamptons Hosp. & Med. Ctr. v. Moore*, 417 N.E.2d 533 (N.Y. 1981) ("The doctrine of estoppel is not applicable to the State acting in a governmental capacity."). The State of Washington is no exception. *State v. O'Connell*, 523 P.2d 872, 891, supplemented, 528 P.2d 988 (Wash. 1974) ("It is the general rule that the courts will not apply principles of equitable estoppel against the government or government subdivisions under certain situations.")

This Court has never laid out circumstances under which equitable defenses may be raised against the United States. *Heckler*, 467 U.S. at 66 ("Thus, assuming estoppel can ever be appropriately applied against the Government . . ."); *id.* at 68 (Rehnquist, J., concurring) ("I agree with the Court that there is no need to decide in this case whether there are circumstances under which the Government may be estopped.").

In *City of Sherrill*, the Oneida Indian Nation ("OIN") sued the local municipality to enjoin the imposition of property taxes on fee land owned by the tribe. The parcel was part of the tribe's aboriginal territory that had been sold 200 years prior in contravention of the Non-Intercourse Act, and recently reacquired by the tribe on the open market. *City of Sherrill*, 544 U.S. at 202. By that point 99 percent of the population was non-Indian. *Id.* at 211. The Court held that "[t]he wrongs of which OIN complains in this action occurred during the early years of the Republic, ... [and that] [i]t is well established that laches, a doctrine focused on one side's inaction

and the other's legitimate reliance, may bar long-dormant claims for equitable relief." *Id.* at 216-17.[5] The Court denied relief to the OIN on this basis. The Court also observed that Congress had adopted "a mechanism for the acquisition of lands for tribal communities that takes account of the interests of others with stakes in the area's governance and well-being," thus providing an alternative avenue of relief. *Id.* at 220.

City of Sherrill did not address whether laches or other equitable defenses could be raised against the United States. Instead it looked to the doctrines of laches, acquiescence, and impossibility to resolve a dispute over taxing authority. Not only was there a 200 year passage of time, but the population and character of the land was transformed. In deciding *City of Sherrill*, the Court drew on a line of cases involving the application of equity to sovereign boundary disputes. *Id.* at 218 ("As between States, long acquiescence may have controlling effect on the exercise of dominion and sovereignty over territo-

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[5] *Amici* take the position that *City of Sherrill* was inconsistent with a large body of law that finds that the defense of laches has no application to land claims (which do not sound in equity) and to Indian land claims in particular, and that *City of Sherrill* inappropriately applies an ill-defined "disruption" standard that blindly prioritizes the interest of state governments over those of tribes. *See* Kathyrn Fort, *The New Laches: Creating Title Where None Existed*, 16 GEO. MASON L. REV. 357 (2009). It is not necessary, however, to revisit that issue here. As already noted, the United States was not even a party to *City of Sherrill*. Moreover, the decision itself is a thin reed for the State's invitation to alter the longstanding balance of power between the federal government and the states in federal court litigation.

ry."), citing *Ohio v. Kentucky*, 410 U.S. 641, 651 (1973), *Massachusetts v. New York*, 271 U.S. 65, 95 (1926), *California v. Nevada*, 447 U.S. 125, 131 (1980).

No such disputes are present here. The defendants in the cases briefed by the parties in *City of Sherrill* did not generalize beyond these border disputes. No decision addressed more generic federal statutes or regulations, such as those involving highway construction projects. Extrapolating *City of Sherrill* as a basis for finding waiver against the United States government is not supported anywhere in the record of the Court's decision or the record on which it was based.

The development of this doctrine in the lower courts since *City of Sherrill* is instructive. It appears no court has applied *City of Sherrill* to bar any claims other than those involving jurisdictional disputes over land. For example, the Tenth Circuit rejected a claim by the Town of Myton, Utah that "[b]ecause the Tribe waited so long to assert claims against it . . . the town has long since and fairly come to expect that it contains no tribal lands qualifying as Indian country." *Ute Indian Tribe of the Uintah v. Myton*, 835 F.3d 1255, 1263 (10th Cir. 2016)(Gorsuch, J.). Instead the court observed that the lands had reverted to the tribe in 1945, that the tribe had promptly filed suit when the local government first tried to assert jurisdiction, and that it had subsequently won two separate judgments regarding lands in Myton. *Id.*[6] *See also, Quapaw Tribe of*

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[6] Both the Tenth Circuit and the Central District of California have also held, after *City of Sherrill*, that laches cannot apply to

Oklahoma v. Blue Tee Corp., 653 F. Supp. 2d 1166, 1192 (N.D. Okla. 2009) ("[I]n *Sherrill*, the OIN was attempting to displace local and state governments by asserting its own sovereign authority over land which it had not inhabited for almost 200 years. By contrast, the Tribe is asserting claims under Oklahoma law concerning an alleged public nuisance on tribal land."); *Saginaw Chippewa Indian Tribe of Michigan v. Granholm*, No. 05-10296-BC, 2008 WL 4808823, at *22–23 (E.D. Mich. Oct. 22, 2008) ("First, quite apparent is the fact that Defendants' incremental assumption of governmental responsibilities occurred sometime after the treaties in 1855 and 1864. Clearly, the challenged conduct is not the same sort of distinct ancient wrong arising from the early days of the Republic that was at issue in either *Sherrill* or *Cayuga*.").

The same considerations that underlie this Court's reluctance to apply equitable defenses to bar the United States are still relevant today. That a treaty may be old does not render its obligations less important. Neither the executive nor the states may alter or waive Indian treaty obligations. This Court has said, "Congress may abrogate Indian treaty

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lands actually held in trust by the United States. *Myton*, 835 F.3d at 1263. ("For one thing, the lands that reverted to the Tribe in 1945 are owned by the United States and held in trust for the benefit of the Tribe. And given this, it is far from clear whether the doctrine of laches could be used to determine the fate of this territory, for laches is a line of defense that usually may not be asserted against the United States."); *Agua Caliente Band of Cahuilla Indians v. Coachella Valley Water Dist.*, No. EDCV13883JGBSPX, 2016 WL 2621301, at *3 (C.D. Cal. Feb. 23, 2016).

rights, but it must clearly express its intent to do so." *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 202 (1999). If statutory language that "makes no mention of Indian treaty rights" will not be interpreted to abrogate those rights, then surely a Clean Water Act permit that "makes no mention of Indian treaty rights" cannot do so either. *Id.* at 203.

II. The affirmative defense of laches was never raised below and is not supported by findings of fact in the record.

Laches is an affirmative defense that must be pleaded and proven. "A defendant asserting the doctrine of laches must affirmatively establish: (1) knowledge by plaintiff of facts constituting a cause of action or a reasonable opportunity to discover such facts; (2) unreasonable delay by plaintiff in commencing an action; and (3) damage to defendant resulting from the delay in bringing the action." *Davidson v. State*, 802 P.2d 1374, 1381 (Wash. 1991).

The State raised defenses of waiver and estoppel, but it did not allege laches. Pet. App. 274a ("The affirmative defenses laid out in paragraphs 6.1 through 6.8 of Washington's answer are based on the doctrines of waiver or estoppel."). There was a seven-day bench trial, with extensive findings of fact by the district court, Pet. App. 128a, but the judge made no findings of fact that would allow an appellate court to rule in favor of the State on this ground. It was well within the State's power to plead an affirmative defense of laches and endeavor to prove it, but this was not done.

In contrast, the statement regarding rehearing *en banc* suggests that Respondents and the United

States waited more than 100 years to discover that barrier culverts are a violation of the Stevens Treaties: "Nonetheless, it apparently *just* occurred to the Tribes, the United States, and our court that in order to fulfill nineteenth century federal treaty obligations, the State of Washington must now be required to remove physical barriers which might impede the passage of salmon." Pet. App. 18a (emphasis in original). "Given the United States' involvement in designing the culverts and its long acquiescence in their existence, one might suppose that an equitable doctrine such as laches would bar suit by the United States." *Id.* at 33a.

The relevant findings of fact in the record below also do not support a defense of laches. Neither the stream blockages, nor the substantial degradation of the fishery that the blockages have caused, dates back to the time of the Stevens Treaties. It would have been the State's responsibility, as the party asserting laches, to prove when the "facts constituting a cause of action," *Davidson*, 802 P.2d at 1381, occurred, and it has not done so. There is no proof in the record that a cause of action for the United States and the Tribes happened sufficiently long ago for laches to become an issue.

The recent drops in the salmon harvest attest to the timeliness of the suit. According to the district court, "Salmon abundance has declined precipitously from treaty times, but particularly in the last few decades." Pet. App. 157a, ¶ 7. Harvests of salmon have declined dramatically since 1985," Pet. App. 175a, ¶ 8. "The Tribes are *at present* unable to harvest sufficient salmon to meet their needs and provide a livelihood for those tribal members who

desire to fish salmon for a living." *Id.* at 158a, ¶ 13 (emphasis added).

An additional consideration is the reality on the ground. The number of barrier culverts continues to grow faster than the State is repairing or replacing culverts, creating a continual stream of fresh violations. Between 2009 and 2011, the State completed 24 barrier culvert projects. *Id.* at 162a, ¶ 28. At this rate it would take a century to replace all the barrier culverts in the inventory. *Id.* at 163a. During the same period, the total number of barrier culverts increased from 1,158 to 1,236. *Id.* at 163a-64a, ¶ 29.

Allegations relating to culverts were raised at the very beginning of this case, in the 1970s, when the district court chose to bifurcate those issues and delay "phase II" discovery until after "phase I" was complete. Joint App. 800a; 802a. After discovery, the United States and Respondents moved for summary judgment, and specifically noted that the challenged blockages included barrier culverts. *Id.* 806a. Since the state highway system was completed in 1968, *id.* at 179a-180a, 398a, little time had passed. Furthermore, even the culverts on the oldest roads have often been subject to continuing violations: culverts wear out and are ordinarily replaced every 30 to 80 years and many state highways have been enlarged and widened. Joint App. 134a; 154a.

Finally, and despite what the State asserts here, there is nothing inherently unreasonable about requiring even aging culverts to be rebuilt so that fish may pass through and reproduce. The Supreme Judicial Court of Massachusetts considered the application of laches to an "ancient dam" that blocked the passage of fish in 1808 – and rejected it

as a defense against the government. *Inhabitants of Stoughton v. Baker*, 4 Mass. 522, 526 (1808). The court required the dam owners to reimburse the public for the cost of repairing the dam, finding that "every owner of a water-mill or dam holds it on the condition, or perhaps under the limitation, that a sufficient and reasonable passage-way shall be allowed for the fish." *Id.* at 528. "This limitation, being for the benefit of the public, is not extinguished by any inattention or neglect, in compelling the owner to comply with it." *Id.* "For no laches can be imputed to the government, and against it no time runs so as to bar its rights." *Id.* The Stevens Treaties may be old but the rights they solemnly memorialized are perpetual and very much alive.

* * *

CONCLUSION

The Court should affirm the decision below.

Respectfully submitted,

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No. 17-269

In The Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, et al.,

Respondents.

On Writ Of Certiorari To The United States Court Of Appeals For The Ninth Circuit

BRIEF AMICUS CURIAE ON BEHALF OF PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS, ALASKA TROLLERS ASSOCIATION, INSTITUTE FOR FISHERIES RESOURCES, FLY FISHERS INTERNATIONAL, NORTHWEST SPORTFISHING INDUSTRY ASSOCIATION, NORTHWEST GUIDES AND ANGLERS ASSOCIATION, ASSOCIATION OF NORTHWEST STEELHEADERS, AND THE CONSERVATION ANGLER IN SUPPORT OF RESPONDENTS

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INTERESTS OF AMICI CURIAE[1]

Amici include non-Indian commercial and sport fishing groups, representing fishing families and businesses that rely on Washington's salmon runs for their livelihood and way of life. With Pacific Coast salmon populations reduced to less than 5% of historical levels, restoration of salmon habitat is critical to preservation of the economic, cultural, and social interests of these groups. Washington's culverts prevent salmon from reaching key spawning and rearing habitat, further harming these already imperiled populations and jeopardizing the fishing industry jobs and communities that Amici represent.

Amici Pacific Coast Federation of Fishermen's Associations, Alaska Trollers Association, and Institute for Fisheries Resources represent commercial fishing families throughout the Pacific Northwest and Alaska. Pacific Coast Federation of Fishermen's Associations is the largest trade association of commercial fishermen on the West Coast. Its members include the Washington Trollers Association and a number of other commercial fishermen's associations, vessel owners' associations, port associations, and marketing associations. Institute for Fisheries Resources is dedicated to

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[1] Pursuant to Rule 37 of the Rules of the U.S. Supreme Court, the undersigned represent that (1) all parties consented to the filing of this brief; (2) no counsel for any party authored this brief in whole or in part; and (3) no person or entity other than the above-named amici curiae and their counsel made a monetary contribution to the preparation or submission of this brief.

marine resource protection and conservation. Alaska Trollers Association represents Alaska's commercial salmon trollers, who are impacted by Washington's barrier culverts because many of the salmon that spawn in Washington streams are caught in ocean waters off the coast of Alaska.

Amici Fly Fishers International, Northwest Sportfishing Industry Association, Northwest Guides and Anglers Association, Association of Northwest Steelheaders, and The Conservation Angler represent sport fishers and family-owned businesses catering to anglers in the Pacific Northwest. Fly Fishers International is dedicated to promoting fly fishing as a recreational use of aquatic resources and to preserving, protecting, and restoring aquatic resources. Northwest Sportfishing Industry Association is a trade organization of nearly 300 sporting goods manufacturers, wholesalers, retailers, marinas, and guides in Washington and Oregon. Northwest Guides and Anglers Association represents fishing guides, charters, and sport anglers in Washington and Oregon. Association of Northwest Steelheaders represents sport anglers dedicated to enhancing and protecting Northwest fisheries and their habitats. The Conservation Angler advocates for wild fish and fisheries, protecting and conserving wild steelhead, salmon, trout and char throughout their Pacific range.

SUMMARY OF ARGUMENT

Washington's salmon fisheries are vital to non-Indian fishing families in Washington and Alaska, and local communities and cultures throughout both states. Salmon fishing has provided economic opportunity and a way of life for generations. Culverts owned by the State of Washington block access to vast areas of salmon habitat and spawning grounds, crippling these fisheries. Harm to Washington's salmon fisheries directly harms fishing families and businesses throughout the Northwest and Alaska. The district court correctly found that injunctive relief was necessary to address the harm caused by the State's culverts. Moreover, the district court correctly found that the injunction ordering replacement and repair of these barrier culverts was in the public interest. Amici respectfully submit that the injunctive relief ordered by the district court and upheld by the Court of Appeals should be affirmed in all respects.

ARGUMENT

I. SALMON RUNS IN WASHINGTON HAVE SUPPORTED A WAY OF LIFE FOR GENERATIONS OF FISHING FAMILIES AND COMMUNITIES.

A. Salmon Are An Integral Part Of Life In The Northwest.

Salmon are so important to Washington and its residents that they have achieved iconic status, bound tightly to many Washington citizens' commercial and cultural identities. Salmon iconography is omnipresent in advertising and artistic renderings throughout the state. Famous chefs' menus, grocery stores, and farmers' markets feature local salmon, and communities throughout Washington celebrate the return of salmon with festivals, competitions, and public art displays. The City of Westport on the Washington coast, for example, proclaims itself the "Sport-Fishing Capital of the World," and offers a $10,000 prize for the largest chinook salmon caught off a Westport charter boat.[2] The City of Issaquah at the foothills of the Cascade Mountains hosts a "Salmon Days" festival complete with a parade, concerts, a farmers' market, and vendor stalls offering all things salmon.[3] The City of Olympia, Washington's capital, proudly displays

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[2] Westport-Grayland Chamber of Commerce and Visitors Center, *Fishing Information*, http://westportgrayland-chamber.org/fishing_info.php.

[3] The Greater Issaquah Chamber of Commerce, *Salmon Days 2018*, https://www.issaquahchamber.com/salmondays.

salmon created by local artists to promote dialogue about salmon – "our heritage and our children's inheritance."[4] Further north, the City of Bellingham invites visitors and residents to connect to the community's history by visiting the Whatcom Creek Salmon Art Trail, which features a series of artworks "[u]sing salmon and salmon habitat as a window into this place."[5] Salmon are woven into the cultural fabric of the entire state.

While many Washington residents value salmon, none more than the fishing families who depend on salmon for their livelihoods. Commercial fishing generates jobs in smaller coastal communities that lack the diversity of economic opportunity present in major urban areas.[6] For example, in 2015, the Washington coast town of Westport had under 2,000 residents and over 600 were employed in commercial fishing

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[4] City of Olympia, *Olympia Salmon Run*, http://olympiawa.gov/city-services/parks/public-art/olympia-salmon-run.aspx.

[5] City of Bellingham, *Whatcom Creek Salmon Art Trail*, https://www.cob.org/documents/parks/parks-trails/salmon-art-trail.pdf.

[6] Community Attributes Inc., *Washington State Maritime Sector Economic Impact Study* at 37-40 (2017), https://www.maritimefederation.com/uploads/2/9/9/6/29962189/cai.wmf.maritime_cluster_study_2017_update.2017_0413.pdf. *See also* Wash. Dep't of Fish and Wildlife, *Final Report: Economic Analysis of the Non-Treaty Commercial and Recreational Fisheries in Washington State* at 12 (2008 & Supp. 2012), https://wdfw.wa.gov/publications/00464/wdfw00464.pdf [hereinafter *Final Report*]; Gordon Gislason & Gunnar Knapp, *Economic Impacts of Pacific Salmon Fisheries*, Pacific Salmon Comm'n, at 27 (2017), *available for download at* http://www.psc.org/download/333/special-reports/9337/economic-impacts-of-pacific-salmon-fisheries.pdf.

activities.[7] In 2016, commercial salmon landings in Washington State were about 15.8 million pounds, valued at more than $26 million at *ex-vessel* (point of landing) wholesale prices.[8] The majority of Washington's commercial fishing jobs stem from the watersheds covered by the injunction in this case.[9] Alaska's fishing families also depend on Washington's salmon because many of the salmon caught off the coast of Southeast Alaska are from Washington.[10] In 2016, commercial salmon landings in Alaska were 542.6 million pounds, valued at $380.5 million.[11]

It is not only fishing families that rely on salmon for their livelihoods. From boat builders to seafood processers, commercial salmon fishing generates many

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[7] Community Attributes Inc., *supra* n.6, at 40.

[8] Nat'l Marine Fisheries Serv., *Fisheries of the United States* at xxiii (2016), *available for download at* https://www.fisheries.noaa.gov/resource/document/fisheries-united-states-2016-report. *See also* Gislason & Knapp, *supra* n.6, at 12 (showing 2015 harvests with *ex-vessel* value of over $27.5 million for Washington).

[9] *Compare* Community Attributes Inc., *supra* n.6, at 33 (commercial fishing and seafood processing jobs by Washington county in 2015) *with* JA 286a-287a (maps of Case Area).

[10] *See* William D. Templin & Lisa W. Seeb, *Clues to Chinook Salmon Nearshore Migration in Southeast Alaska from Estimates of Stock Composition in Troll Harvests*, Alaska Dep't of Fish and Game, https://www.adfg.alaska.gov/static/fishing/PDFs/research/chinook_migration_poster.pdf (showing the origins of chinook salmon caught in the commercial troll fishery in the nearshore waters of Southeast Alaska).

[11] Nat'l Marine Fisheries Serv., *supra* n.8, at xxiii (values at *ex-vessel* wholesale prices). *See also* Gislason & Knapp, *supra* n.6, at 12 (showing 2015 harvests with *ex-vessel* value of over $111 million for Southeast Alaska).

additional jobs in Washington and Alaska. In 2015, Washington's commercial fishing and seafood processing sector employed 15,900 workers and generated $9.4 million in revenue.[12] And in 2013, the Alaska seafood industry created 23,900 jobs and $1.34 billion in labor income in the Puget Sound region, including jobs attributable to commercial fishing (active permit owners and crew members who travel to Alaska to fish) and Washington-based processing of Alaska-caught seafood.[13] Between 2012 and 2015, an average of 5,380 full-time equivalent jobs in Alaska and 3,090 full-time equivalent jobs in Washington were attributable to the commercial salmon fishing industry alone.[14] Like the commercial fishing jobs, many of the additional jobs generated by the fishing industry are located in smaller coastal communities that are heavily dependent on the fishery.[15]

Sport fishing is also a major economic driver in the Pacific Northwest, especially in smaller communities. In Washington in 2006, 142,000 anglers fished recreationally for salmon and another 113,000 fished for

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[12] Community Attributes Inc., *supra* n.6, at ii.

[13] *See* Seattle Metropolitan Chamber of Commerce, *Ties That Bind: The Enduring Economic Impact of Alaska on the Puget Sound Region* 18-22 (2015), https://www.seattlechamber.com/docs/default-source/Events-and-Programs-Documents/ties-that-bind-report-feb-2015.pdf?sfvrsn=2.

[14] *See* Gislason & Knapp, *supra* n.6, at iv, 14.

[15] *See Final Report*, *supra* n.6, at 12 (These jobs are "important at the community level along the Washington Coast, the Strait of Juan de Fuca, and the Puget Sound areas.").

steelhead.[16] From fishing guides to small bait-and-tackle store owners, from drift boat dealers to local hotel proprietors, from authors of fishing guides to local restaurants, from charter boat operators to outfitters, the economic ripple effect from these hundreds of thousands of anglers is huge. A 2010 report concluded that Washington's annual economic activity from sport fishing generates $1.1 billion in economic activity and 14,655 associated jobs.[17] On average between 2012 and 2015, salmon sport fishing and associated industries contributed 3,160 full-time equivalent jobs in Washington and 1,220 full-time equivalent jobs in Alaska.[18] During those same years, the average total economic impact of the salmon sport fishing industry was $394 million in Washington and $153 million in Alaska.[19]

These numbers tell only part of the story. Salmon fishing is more than a livelihood; it is a way of life for commercial and sport fishing families alike. Amy Grondin, a member of Amici Washington Trollers Association and Alaska Trollers Association, makes her living as a commercial salmon fisherman in Washington and Alaska, fishing with her husband Greg off of the F/V *Duna*, a forty-foot wooden fishing boat built in

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[16] *Id.* at 18.

[17] Wash. Dep't of Fish and Wildlife, *Fish, Wildlife and Washington's Economy* at 1 (2010), https://wdfw.wa.gov/publications/01145/wdfw_01145.pdf.

[18] Gislason & Knapp, *supra* n.6, at v.

[19] *Id.* at 18-23.

1936 in Tacoma.[20] A life devoted to fishing can even teach you to love the smell of marine engine fuel – she writes that "[i]t is a smell that for days on end scents your waking hours, tea breaks and drea..nless sleeps when the deck work has battered you just enough to hurt but not break you. . . . Diesel perfume is a smell you eventually wash from your clothes after a few weeks back on land when season is done but one that never leaves you. It will summon all of Alaska back to the surface when on a dark night it unexpectedly greets you at the wheelhouse door in Seattle."[21] River guides spend a lifetime learning and sharing the tips that lead to the best catch.[22] Behind the *ex-vessel* values and numbers of full-time equivalent jobs are individuals and communities whose cultural and personal attachment to salmon is integral to their identity.

In addition to those who earn their living fishing, there are many more for whom fishing for salmon is a defining part of their cultural lives. Some learned to tie a fly from a parent or grandparent; others have newly discovered a sense of place on the water. Great salmon fishing trips become life milestones that are never forgotten. A father remembers the "indelible impression" left by the first large chinook salmon his son landed on

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[20] Amy Grondin, *Gogreen Seattle Conference 2014 Presentation*, WordPress (May 2, 2014), https://fishequalsfood.com/2014/05/02/gogreen-seattle-conference-2014-presentation/.

[21] Amy Grondin, *Diesel Perfume*, WordPress (Oct. 22, 2014), https://fishequalsfood.com/2014/10/22/diesel-perfume/.

[22] Steven Lane, *To Catch Fish, Keep Clean*, Columbian (Feb. 4, 2010), http://www.columbian.com/news/2010/feb/04/guide-cleanliness-a-key-to-catch-salmon-steelhead/.

his own, on a float down the Hoh River in Washington: "With me handling the oars and him up front setting out the plugs, the magic happened. After a crushing strike, a perfect hook-set and a few sizzling runs that saw us chase that big springer downriver more than 200 yards, I slipped the net under a gorgeous 35-pound hen [female fish] that his 8-year-old arms could barely lift for a photo."[23] A fly fisherman remembers hooking his first pink salmon in Washington 20 years earlier: "A silver-bright pink salmon hit on my first cast and we both were hooked; she on that pink squid, me on fly fishing for pinkies."[24] A retired guide can recall every move in an epic battle with the one that got away, a 60-plus pound chinook (king) salmon on the Humptulips River near Aberdeen, Washington.[25] Even 20 years later, "it feels like it happened just before lunch today. I remember every detail of it. That one will stay with me forever."[26] Salmon fishing is a tradition to be shared and cherished for many in Washington. For cultural, commercial, and recreational interests alike, salmon are invaluable to life in the Pacific Northwest.

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[23] Kris Olsen, *Doctor's Orders: Fall Steelhead*, Anglers Journal (Dec. 13, 2017), https://www.anglersjournal.com/people/doctors-orders-fall-steelhead.

[24] David Paul Williams, *Puget Sound Pinks*, American Angler, https://www.americanangler.com/puget-sound-pinks/.

[25] William Sisson, *I Almost Couldn't Breathe*, Anglers Journal (May 25, 2016), https://www.anglersjournal.com/columns/almost-couldnt-breathe.

[26] *Id.*

B. Declining Salmon Runs Threaten Livelihoods And Entire Communities.

Salmon and steelhead are disappearing from Washington and the Pacific Northwest at alarming rates. Once too numerous to count, these fish today persist at only a small fraction of their historic abundance. The collapse of what were once the world's largest runs of salmon and steelhead has led the National Marine Fisheries Service to protect 28 different salmonid populations as either threatened or endangered under the federal Endangered Species Act. Many other populations are already extinct. The elimination and degradation of available salmon habitat has been a major factor in this decline. No party disputes these basic and disturbing facts. Pet. App. 136a ("Today, while some salmon stocks in the Case Area are healthy, others are depressed, in danger of extinction, or already extinct.") (facts admitted by all parties). *See also* Pet. App. 132a ("Since Treaty time, overharvest, habitat alteration, poor hatchery practices, and hydropower development are some of the human-caused factors that have greatly reduced the abundance of salmon available for tribal harvest in the Case Area.").

Salmon are in trouble, and so are the fishing families who depend on them. When fewer salmon return from the ocean to Washington's rivers, this translates directly to lower catch limits, shorter seasons, and a reduced ability for commercial fishing families to earn

a living.[27] Salmon harvests fluctuate from year to year, but the overall trend has been one of sharp decline. *See, e.g.*, JA 204a-205a (showing declining trend in salmon harvest in western Washington by species from 1974 through 2003); JA 591a; JA 590a. Chinook (king) salmon and coho salmon are the most commercially valuable of western Washington's salmon species,[28] and these are the species that have seen some of the steepest declines.[29] From 1950 to 1955 in Washington, commercial landings of chinook salmon averaged 10,248,683 pounds and coho averaged 11,779,067 pounds, but from 2011 to 2016, chinook landings averaged only 5,866,870 pounds, a reduction of about 43%, and coho landings averaged only 3,102,894 pounds, a reduction of about 74%.[30]

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[27] *See* Pacific Fishery Management Council, Pacific Coast Salmon Fishery Management Plan (Mar. 2016) at 27-30, http://www.pcouncil.org/wp-content/uploads/2016/03/FMP-through-A-19_Final.pdf. *See also* Pacific Fishery Management Council, Salmon: Background, https://www.pcouncil.org/salmon/background/.

[28] *See* Gislason & Knapp, *supra* n.6, at 12 Exh. 2 (compare weight landed with *ex-vessel* value).

[29] *See* Wash. State Recreation and Conservation Office, Governor's Salmon Recovery Office, *State of Salmon in Watershed 2016* at 2 (showing declining trend in non-tribal chinook and coho harvests from the 1970s through 2015), https://stateofsalmon.wa.gov/governors-report-2016/.

[30] Nat'l Marine Fisheries Serv., Annual Commercial Landing Statistics (searchable by state, species, and year), https://www.st.nmfs.noaa.gov/commercial-fisheries/commercial-landings/annual-landings/index.

Washington's salmon sport fisheries have also been declining for decades.[31] From 1971 to 1974, the annual sport salmon catch in Washington averaged 1,224,881 salmon, but from 2010 to 2015, it dropped to an average of only 783,185 salmon, a reduction of about 36%.[32] As with the commercial fisheries, the more valuable fisheries have seen the steepest declines. Excluding pink salmon (a numerous but less valuable species[33]), the sport catch in Washington dropped during 2010 to 2015 to an average of only 539,584 salmon, a decline of 56% from the 1971 to 1974 average.[34]

Runs are so depleted that Washington's Department of Fish and Wildlife must sometimes close certain streams or runs to sport fishing for an entire season, including some of Washington's most popular

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[31] *See* Eric Kraig & Tracey Scalini, 2015 Washington State Sport Catch Report, Washington Department of Fish and Wildlife (Feb. 2017) at 14 tbl. 4 (showing declining trend in the annual sport fishing catch from the 1970s through 2015), https://wdfw.wa.gov/publications/01886/wdfw01886.pdf; Community Attributes Inc., *supra* n.6, at 29 Exh. 19 (graph of Washington Department of Fish and Wildlife sport catch report data).

[32] *See* Kraig & Scalini, *supra* n.31, at 14 tbl. 4.

[33] *See* Wash. Dep't of Fish and Wildlife, Species Info, https://wdfw.wa.gov/fishing/washington/Species/9009/ (pink salmon runs only occur in Washington in odd-numbered years); Kraig & Scalini, *supra* n.31, at 3 (nearly 40% of the total recreational salmon catch in Washington in 2015 were pink salmon); Gislason & Knapp, *supra* n.6, at 12 Exh. 2 (compare weight landed with ex-vessel value).

[34] *See* Kraig & Scalini, *supra* n.31, at 14 tbl. 4 (average of total sport catch in even numbered years – 2010, 2012, and 2014 – is 539,584).

rivers.[35] For example, the Skagit is "a storied river [with] a history of producing larger and numerous native steelhead."[36] It was deservedly popular with sport fishers: "The water below the Cascade [a tributary that feeds into the Skagit] is broad and relatively flat with long even riffles and runs. In other words, perfect fly water."[37] While there are also summer sport fisheries in the Skagit, "[a]s the days move into the new year, the prize fish of the system, the native winter steelhead, become a distinct possibility and anglers pursue these fish religiously through the end of the season at the end of April. There are only a few places in the world where you can pursue native steelhead as winter turns to spring and the Skagit is one of the best places to do it."[38] But precariously low numbers of returning steelhead has forced the closure of this popular sport fishery for many years.[39]

The decline of Washington's salmon runs has a significant human cost. Tele Aadsen, a member of Amicus Alaska Trollers Association, fishes commercially out of southeast Alaska with her partner Joel off of "our girl,

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[35] Wash. Dep't of Fish and Wildlife, Recreational Salmon Fishing, When & Where to Fish for Salmon, https://wdfw.wa.gov/fishing/salmon/whenwhere/.

[36] The Avid Angler, Skagit River, WA, http://www.avidangler.com/FC_skagit.html.

[37] *Id.*

[38] *Id.*

[39] *See* Mark Yuasa, Emergency closure for winter steelhead likely on Skagit, The Seattle Times (Dec. 24, 2011), https://www.seattletimes.com/sports/other-sports/emergency-closure-for-winter-steelhead-likely-on-skagit-outdoor-notebook/.

the F/V *Nerka*."[40] She writes that even when the fishing is good, it can be a hard profession. Long days and years on the boat wears bodies down.[41] The sea can claim boats and lives of friends and loved ones.[42] But it is that much harder when each day comes with the financial strain of not knowing whether the season's catch will carry you through the year. "Every fish counts. . . . Joel and I sat surrounded by sheets of numbers: lists of anticipated winter expenses, balances of fish already sold, conservative estimates of what we could expect to yet be paid. When you're young, self-employed in an unpredictable industry and looking at a long, uncertain off-season, the decision to quit a few days early could mean the cost of several months' mortgage, car repairs, or a long-over-due trip to the dentist."[43] Shorter and less predictable sport fishing seasons mean that businesses that cater to sport anglers have been "suffocating for years," as the Director of Amici Northwest Sportfishing Industry Association has explained. "In particular, the smaller businesses

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[40] Tele Aadsen, *Vanishing Boats, Lost Fishermen, and the Price of Fish*, WordPress (Mar. 12, 2012), http://www.teleaadsen.com/vanishing-boats-lost-fishermen-and-the-price-of-fish.

[41] Tele Aadsen, *Scenes of King Salmon Trolling*, WordPress (Aug. 25, 2012), http://www.teleaadsen.com/scenes-of-king-salmon-trolling-part-1.

[42] Aadsen, *Vanishing Boats*, *supra* n.40.

[43] Tele Aadsen, *How to End the Salmon Season (aka Selective Memory, the Fisherman's Friend)*, WordPress (Oct. 3, 2011), http://www.teleaadsen.com/how-to-end-the-salmon-season-aka-selective-memory-the-fishermans-friend.

are folding like chairs – we lost The Duffle Bag last year, a chain of three outdoors retailers in Seattle."[44]

For Washington's coastal communities that rely on the fishing economy, this decline has been devastating.[45] Fishing-dependent communities such as Westport and the areas surrounding Willapa Bay have been hit so hard by exceptionally low catches in 2015 and 2016 that the U.S. Secretary of Commerce has declared them eligible for federal disaster relief.[46] Especially for younger and less established fishermen, years as bad as these do not just mean a tighter belt for a season. As the Director of Amicus Washington Trollers

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[44] Mark Graves, Five Questions with Liz Hamilton, executive director of the Northwest Sportfishing Industry Association, The Oregonian/Oregon Live (Mar. 11, 2009), http://www.oregonlive.com/business/index.ssf/2009/03/five_questions_with_liz_hamilt.html.

[45] Gislason & Knapp, *supra* n.6, at 27; Community Attributes Inc., *supra* n.6, at 37-40 (discussions of Ilwaco, Chinook, Willapa Harbor, and Westport).

[46] John Ewald, *Commerce Secretary Pritzker Declares Fisheries Disasters for Nine West Coast Species*, Nat'l Oceanic and Atmospheric Admin. (Jan. 19, 2017), http://www.noaa.gov/news/commerce-secretary-pritzker-declares-fisheries-disasters-for-nine-west-coast-species. *See also* U.S. Dep't of Commerce, Nat'l Oceanic and Atmospheric Admin., Letter of Determination on 2016 Ocean Salmon Troll Fishery (Jan. 18, 2017), http://www.nmfs.noaa.gov/sfa/management/disaster/determinations/73_ocean_salmon/determination.pdf; U.S. Dep't of Commerce, Nat'l Oceanic and Atmospheric Admin., Letter of Determination on 2015 Grays Harbor and Willapa Bay Fisheries (Jan. 18, 2017), http://www.nmfs.noaa.gov/sfa/management/disaster/determinations/72_coho_salmon/determination.pdf; Jay Inslee, State of Wash. Office of the Governor, Letter to Penny Pritzker, Secretary of Commerce, U.S. Dep't of Commerce (letter dated Sept. 14, 2016), http://www.nmfs.noaa.gov/sfa/management/disaster/determinations/72_coho_salmon/request.pdf.

Association explained, "[w]e have a number of younger guys who have bought charter boats, not established yet, holding on by a thread from their boats going back to the bank."[47] With salmon populations hovering at such precariously low levels, the significant increase of spawning and rearing habitat that will result from removal of the State's barrier culverts would be a lifeline for salmon and fishing families alike. The district court correctly found that removal of the State's barrier culverts would immediately benefit these imperiled populations, and the district court's injunction is an essential step to preserving these valuable runs.

II. INJUNCTIVE RELIEF REQUIRING THE TIMELY REMOVAL OF BARRIER CULVERTS IS CRITICAL TO THE HEALTH OF WASHINGTON'S SALMON RUNS.

Salmon have thrived in the Pacific Northwest for millennia. Using both fresh and salt-water habitats, these anadromous species' diverse survival strategies have enabled them to survive the ever-changing and sometimes violent nature of a region prone to earthquakes, drought, mudslides, wildfire, floods, and volcanic eruptions. These remarkable fish are born in freshwater streams across Washington and the Pacific Northwest. After varying amounts of time in freshwater, they migrate downstream hundreds of

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[47] Dan Hammock, *Commercial Fisheries Disaster Opens Door to Federal Relief for Washington Communities*, Spokesman-Review (Jan. 23, 2017), http://www.spokesman.com/stories/2017/jan/23/commercial-fisheries-disaster-opens-door-to-federa/.

miles to the ocean where they range for thousands of miles, feeding and growing for several years before fighting their way back upstream to the same waters where they were born to spawn and die. Along the way, salmon and steelhead are vital prey for countless species, from other fish to bears, eagles, whales, and humans.[48]

Culverts that block streams and prevent salmon from reaching their freshwater habitat interrupt this cycle at every turn. Barrier culverts block mature salmon traveling upstream from freshwater habitat where they can spawn. Pet. App. 160a-161a. For those salmon that are able to access what habitat remains to spawn, the resulting juvenile salmon must also contend with culverts that block their passage, both as they search for ideal rearing habitat in freshwater streams and once they eventually migrate downstream to the ocean. Pet. App. 160a.

The amount of habitat that these barriers eliminate is huge: as the district court found, "[f]isheries scientists have identified approximately 1,000 miles of stream, comprising nearly 4.8 million square meters of stream habitat upstream of blocked culverts." Pet. App. 157a. And less habitat where fish can reproduce means fewer fish. The district court found that "[s]almon production is directly related to the amount and quality of habitat available. Loss and degradation of habitat have greatly reduced salmon production in the Case

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[48] *See generally* Thomas P. Quinn, *The Behavior and Ecology of Pacific Salmon and Trout* (1st ed. 2005).

Area." Pet. App. 158a. Increasing available spawning habitat by removing culverts that block fish, on the other hand, can lead to rapid increases in salmon populations. As the district court found, removing barrier culverts "provides immediate benefit in terms of salmon production, as salmon rapidly re-colonize the upstream area and returning adults spawn there." Pet. App. 166a-167a.

Barrier culverts are not the only challenge that salmon populations face. But the district court correctly found that they are a major part of the problem. Pet. App. 162a ("State-owned barrier culverts are so numerous and affect such a large area that they have a significant total impact on salmon production."). In this proceeding, the district court ordered Washington to replace culverts that block salmon from reaching spawning and rearing habitat. The district court correctly found that replacing the State's barrier culverts will significantly benefit salmon, and the public interest strongly supports the grant of injunctive relief. The injunction should be upheld.

A. Barrier Culvert Removal Is Necessary To Increase Salmon Runs.

Washington openly acknowledges that "[s]almon fishing has played an important role in the economy and culture of the Pacific Northwest for centuries."[49]

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[49] Wash. Dep't of Fish and Wildlife, *Role in Recovery*, https://fortress.wa.gov/dfw/score/score/harvest/harvest.jsp. *See also* Wash. State Recreation and Conservation Office, *supra* n.29, at 1

See also Wash. Br. 9 ("Salmon have long been a vital part of Washington's economy and culture . . . "). Washington also acknowledges the significant benefits that flow from salmon recovery efforts: "salmon recovery brings multiple benefits from clean water to more resilient communities, salmon recovery efforts provide a high return on investment for the state and its residents."[50] The economic benefit of salmon recovery measures is substantial; Washington's governor has found that every $1 million spent on watershed restoration in Washington generates $2.2-$2.5 million in total economic activity for Washington and 15 to 33 new or sustained jobs.[51]

Washington also does not fundamentally dispute that replacing barrier culverts is one of the most effective salmon recovery measures it could take – nor could it, given the State's own repeated statements on the importance and impact of culvert replacement. For example, a recent report by the Washington governor's office finds that "[r]emoving barriers, such as inadequate culverts beneath road crossings or ineffective fish ladders at low head dams, allows salmon to quickly return to their historic spawning grounds," and

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(salmon are "a cultural touchstone and economic engine" for the state).

[50] *See also* Wash. State Recreation and Conservation Office, *supra* n.29, at 1.

[51] *Id. See also* Nat'l Oceanic and Atmospheric Admin., *Economic Benefits of Salmon Restoration* (2014), http://www.westcoast.fisheries.noaa.gov/publications/education/factsheet-pcsrf_050514.pdf (noting that for every dollar invested in salmon restoration, the economy benefits multiple ways).

that "[r]emoving barrier culvers to fish passage is one of the most effective ways to increase salmon production in fresh water."[52] And a short educational video prepared by the Washington Department of Fish and Wildlife, "Making Way for Salmon," highlights barrier culvert replacement as a critical and effective salmon recovery tool:

> Salmon are a vital part of our history, our culture, and our economy here in Washington. The challenges facing them are accelerating, but we know how to help them. Salmon have shown us their resilience; they've shown us their persistence. We've even seen salmon recolonize a stream immediately after taking out a barrier, almost as if they're waiting for us to open the door for them. They're ours to save, and it starts by making way for salmon.[53]

Washington could not and does not question the importance of culvert removal, but the State nonetheless maintains in this litigation that the injunctive relief ordered by the district court will do nothing to improve the health of these imperiled salmon populations. The State offers several arguments to support its

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[52] *See* Wash. State Recreation and Conservation Office, *supra* n.29, at 3-4.

[53] Wash. Dep't of Fish and Wildlife, *Making Way for Salmon*, YouTube (Jan. 26, 2017), https://www.youtube.com/watch?v=X7z5anXzm0k, at 10:02-10:28. *See also id.* at 9:40 ("The reason this stream is so productive is because there's no fish passage barriers.").

internally conflicted position. None withstands scrutiny.

1. Replacing State Barrier Culverts Benefits Salmon Even Where Other Culverts Are Present.

While the State does not dispute the importance of barrier culvert removal as a general matter, the State argues that removing its barrier culverts will have "no impact" because there are many other culverts owned by local governments and private parties in the same watersheds. Wash. Br. 53. The State highlights the need for injunctive relief by attempting to spread the blame to justify its inaction. Removal of the State's barrier culverts will increase habitat even without any further action by other actors while also setting the stage for other responsible parties to become part of the solution.

The State notes that in the Case Area there are many more non-State culverts than State-owned culverts, but it does not logically follow that replacing State culverts "will make no difference to salmon." Wash. Br. 53. The State ignores the key fact that the majority of the State culverts subject to the injunction are *downstream* of local, private, or other non-State culverts, and so removing the State culvert is the key to unlocking the watershed. *See* JA 397a. The State also ignores the important distinction between culverts that block all fish passage and culverts that allow at least some fish to pass. Many of the non-State

culverts in the Case Area are only partial barriers. *See* JA 543a. In such cases, once a State barrier culvert is removed, at least some fish will be able to access additional habitat even if a partial barrier remains.

Even if a non-State culvert currently bars all fish passage, there is no reason to believe that replacing the State barrier culvert will have "no impact" at the end of the day. As Washington's Department of Fish and Wildlife has explained, removal and replacement of barrier culverts owned by private parties and local governments is also ongoing throughout the state. For example, Ebright Creek – now one of the most productive salmon streams for Kokanee salmon off of Lake Sammamish – is accessible to salmon due to a barrier culvert that was replaced on private property.[54] The private-land forest industry has removed close to 5,000 fish passage barriers since 2000, opening up 4,000 miles of additional fish habitat.[55] Washington's counties are working to replace their culverts as well, focusing on the culverts that would open access to areas where industrial forest landowners and small private landowners have already taken steps to remove fish passage barriers.[56] And Tribes are working to find funding and lend their expertise to help private landowners and others remove culverts in areas like the Salt Creek watershed because culvert replacement

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[54] *Making Way for Salmon*, *supra* n.53 at 3:20-:44.

[55] *Id.* at 5:30.

[56] *Id.* at 7:38.

provides "the biggest bang for your buck" compared to other habitat restoration projects. JA 689a.

The State itself also offers assistance for culvert replacement projects. *See* Wash Br. 11. These State assistance programs prioritize opportunities to correct multiple barriers throughout a stream, including through state-local partnerships to address city and county barriers in the same stream systems as State barriers. Wash. Rev. Code § 77.95.180. These programs also consider the amount of habitat a given project will make available in prioritizing and funding projects, *see, e.g.*, Wash. Rev. Code § 76.13.150(6)(a); Wash. Rev. Code § 77.95.160(2)(e), so local anglers can effectively advocate for the replacement of locally owned culverts once State-owned barrier culverts on the same stream have been fixed. And non-State culverts may need to be removed or replaced at the end of their natural life or as part of a larger project. The district court's order requires the State to replace its high-priority barrier culverts over the course of 17 years; low-priority barrier culverts may be replaced on an even longer timeline. There is no reason to assume that non-State barrier culverts will remain unrepaired for 17 years or more.

At bottom, the State's argument for inaction leaves no one with an obligation to take the first step by removing culverts on a stream blocked in multiple places. A culvert replacement stalemate serves no one – not the salmon that desperately need additional habitat, not the river guides and commercial fishing families who depend on healthy runs for their livelihood,

and not the anglers who find their peace in time on the water.

2. Other Recovery Measures Cannot Substitute For Culvert Removal.

The State next argues (at 55-56) that it should be allowed to allocate resources between barrier culvert removal and other salmon recovery efforts as it sees fit. *See also* Wash. Br. 9-13. The State asserts that it will adequately protect salmon without intervention from the Court, but this assertion cannot be reconciled with the decades-long and continuing decline in these species and the communities that depend on them. While amici agree that the State should have every incentive to protect this valuable resource, actual recovery measures have lagged far behind good intentions, and the district court correctly found that the steps taken so far have not led to recovery of these imperiled species. Pet. App. 167a (summarizing status report findings that salmon are declining and habitat degradation is a primary cause).

Moreover, there is reason to doubt that the State will pursue these other salmon recovery programs even if relieved of its obligation to repair its barrier culverts. Washington's record on salmon recovery is mixed at best, and some of the limited salmon recovery measures the State now heralds were only adopted following litigation compelling Washington to act. For example, the State singles out its "stormwater management projects," Wash. Br. 55-56, but neglects to

note that it took years of litigation to compel Washington to adopt standards to reduce polluted storm water entering salmon streams. *See, e.g.*, *Puget Soundkeeper Alliance v. Wash. Dep't of Ecology*, Findings of Fact, Conclusions of Law, and Order, PCHB Nos. 07-021, 07-026, 07-027, 07-028, 07-029, 07-030, 07-037 (Aug. 8, 2008).[57] Similarly, Washington law has long required protection of minimum instream flow levels for salmon, Wash. Rev. Code § 90.54.020, but for a number of watersheds in the Case Area, the State has failed to issue any protected instream flow levels.[58] And even where Washington has designated protected flow levels, the State had to be compelled through litigation to actually protect this flow level from new withdrawals. *See, e.g.*, *Swinomish Indian Tribal Community v. Wash. State Dep't of Ecology*, 178 Wash. 2d 571, 311 P.3d 6 (2013); *Foster v. Wash. State Dep't of Ecology*, 184 Wash. 2d 465, 362 P.3d 959 (2015). Given that the State has taken meaningful action on many critical salmon protections only when compelled to do so, there is good reason to be skeptical that the State will suddenly redouble its efforts if left to its own devices.

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[57] *See also* Blake E. Feist et al., *Roads to Ruin: Conservation Threats to a Sentinel Species Across an Urban Gradient*, 0 Ecological Applications at 1 (2017), https://www.documentcloud.org/documents/4111834-Feist-Et-Al-Pre-Print-2017.html (salmon and especially coho are exceptionally sensitive to the harmful effects of toxic urban storm water runoff).

[58] *See* Wash. Dep't of Ecology, *Instream Flow Rule Status* (2016), https://fortress.wa.gov/ecy/wrx/wrx/fsvr/ecylcyfsvrxfile/WaterRights/wrwebpdf/wsisf.pdf (map of instream flow status by watershed).

The State touts its salmon recovery plans (at 10), but at the time of trial the State had completed recovery plans for only two of the salmon runs in the Case Area, and the two plans that did exist were not enforceable. Pet. App. 156a.[59] The State's former Director of the Department of Fish and Wildlife testified that the State needed to take a comprehensive look at recovery in each watershed, but "we just haven't had the money and the personnel to get it done." JA 746a-747a. The State also points to programs that provide State assistance for voluntary culvert removal programs. Wash. Br. 10-11. Clearly, the State can and should continue to provide assistance to private landowners and local governments that choose to take steps to improve salmon habitat. *See, e.g.*, Wash. Rev. Code § 76.13.150 (assistance for small forest landowners to replace barrier culverts); Wash. Rev. Code § 77.95.060 (state will encourage the development of regional fisheries enhancement groups); Wash. Rev. Code § 77.85.050 (habitat projects under the Salmon Recovery Act "shall not be considered mandatory in nature"). But such voluntary programs cannot substitute for the immediate increase in salmon habitat that will result from the State's replacement of its own barrier culverts.

Finally, while the State argues that it was already working to replace its barrier culverts, the evidence tells a different story. The district court found that it would take more than 100 years to correct the barrier culverts that block significant habitat if the State

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[59] Columbia and Snake River runs are not in the Case Area. *See* JA 287a, 286a.

continued at the pace it kept prior to the injunction. Pet. App. 162a-163a. Given the precariously low population levels of many of these runs, the State's protracted timeframe might well be too late for these species. Even more telling, the number of barrier culverts *increased* between the State's initial inventory and post-trial briefing. Pet. App. 163a-164a. As the district court found, at that pace the State would never finish the task of correcting the barrier culverts. Pet. App. 164a ("Extrapolation from these data would lead to the untenable conclusion that under the current State approach, the problem of WSDOT barrier culverts in the Case Area will never be solved."). This is not success, nor even progress, and the State's argument that it has adequate incentive to correct the problem without intervention from the district court cannot be squared with the facts and the State's own actions.

The State's plea for discretion to prioritize between barrier culvert removal and other efforts as it sees fit would retain the status quo, a status that is harming salmon and the communities that rely on them. The State has been attempting to recover salmon, with limited barrier culvert removal as a component of its efforts, for years – with little to show by way of reduction in the number of barriers or actual recovery of these species. The State has not produced credible evidence that measures that have to date fallen short will suddenly and inexplicably produce different results. The district court's intervention was necessary to ensure timely removal of culverts that block access to vast areas of salmon habitat.

3. There Is Ample Evidence That Culvert Replacement Benefits Salmon.

The district court found that opening up additional habitat by removing barrier culverts would have a significant, positive effect on salmon populations. Pet. App. 166a-167a (Removing barrier culverts "provides immediate benefit in terms of salmon production, as salmon rapidly re-colonize the upstream area and returning adults spawn there."). This finding was based on evidence that barrier culverts lead directly to reduced salmon populations, and that conversely, culvert removal quickly increases populations. *See, e.g.*, Pet. App. 161a (a 1994 analysis of loss of coho salmon production in the Skagit River watershed determined 44% to 58% of the loss of salmon production in tributaries was attributable to barrier culverts); JA 402a ("Correction of barriers to salmon migration often results in a rapid response to colonizing salmon and has been shown to quickly result in increases in juvenile and adult salmon."); JA 427a (Barrier culverts are "one of the most recurrent and correctable obstacles to healthy salmonid stocks in Washington."); JA 422a-425a (fish rapidly colonize new habitat after a barrier is removed); JA 686a ("As commonly recognized by fisheries biologists .... 'Correction of human-made fish passage barriers is one of the most cost effective methods of salmonid enhancement and restoration.'").

More recent research confirms the district court's findings. For example, in a comprehensive study of the effectiveness of habitat improvement projects prepared for several federal agencies in 2016, a team of

scientists concluded that culvert replacement provides significant benefits to salmon.

> Studies evaluating the effectiveness of projects that have removed impassable culverts/dams or have installed fish passage structures in North America and elsewhere have consistently shown rapid colonization by fishes, with colonization time positively correlated with distance of nearby source populations and the abundance of the source populations. The success of fish passage through culverts and fish passage structures depends on appropriate design and installation (e.g., slope, width, length, percent the culvert is countersunk), as well as regular maintenance. The benefits to fish populations from the removal of culverts, small dams, and other migration barriers have been well documented in North America, Europe, and Asia. Studies show that fish typically migrate upstream and colonize new habitats rapidly. For example, the installation of a fish passage structure on a water diversion dam on the Cedar River in Washington State resulted in the recolonization of newly accessible habitat by juvenile and adult salmon and steelhead within 5 years.[60]

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[60] T. Hillman et al., Effectiveness of tributary habitat enhancement projects, Report to Bonneville Power Administration, at 21 (2016) (internal citations omitted), http://www.ucsrb.org/?mdocs-file=2322.

The State attempts to undermine the well-established facts found by the district court by noting (at 57) that salmon harvests have fluctuated over time. While harvests do fluctuate from year to year, the overall trend has been one of sharp decline. *See* JA 589a (the combination of fluctuating ocean conditions and degrading or shrinking freshwater habitat will lead to salmon abundance showing a pattern of fluctuating decline, as has been the case in the Skagit River in Washington).[61] The declining trend is especially evident when harvests are compared over the course of decades; harvests fluctuate annually but the declining trend through the 1980s and 1990s is clear. *See, e.g.*, JA 204a-205a (showing declining trend in total salmon harvest in western Washington by species from 1974 through 2003). Washington suggests (at 57) that salmon harvests have "rebound[ed]" from earlier lows by citing the total 2003 catch, but in fact salmon harvests remained at abysmally low levels in more recent years – the low commercial salmon catch in Washington 2008 and 2012, for example, shows that harvests continue their fluctuation between low and very low levels.[62] For some of Washington's commercial salmon fisheries, harvests in 2015 and 2016 were so low that

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[61] *See also supra* notes 26-33 and accompanying text.

[62] Nat'l Marine Fisheries Serv., Fisheries Economics of the United States, 2015, U.S. Dept. of Commerce, NOAA Tech. Memo. at 52 (2017) (showing annual commercial landings of salmon in Washington in thousands of pounds from 2006 through 2015), https://www.st.nmfs.noaa.gov/Assets/economics/publications/FEUS/FEUS-2015/Report-Chapters/FEUS%202015%20All%20Chapters_Final4_508.pdf.

several fishing-dependent communities qualified for federal disaster relief.[63] One less bad year does not undercut the decades-long declining trend in salmon harvests.

The State also complains (at 56-57) that culverts are not the only reason that salmon runs have declined. But the district court did not have to find that culverts were the *only* cause of declining populations to find that relief was warranted. The district court correctly found that barrier culverts that prevent salmon from reaching their spawning and rearing habitat are a major factor in the decline of salmon populations in Washington. Pet. App. 160a-162a. The district court also correctly found that removal of the State's barrier culverts would lead to significant increases in these imperiled populations. Pet. App. 166a-167a. The State's thinly-veiled attempt to change the subject by pointing to overfishing in the 1800s (at 56) does nothing to undermine the district court's careful and well supported findings of fact.

B. Removal Of Barrier Culverts Is In The Public Interest.

It is well-established that courts must consider the public interest in deciding whether to grant a request for injunctive relief. *See, e.g.*, *Monsanto Co. v. Geertson Seed Farms, Inc.*, 561 U.S. 139, 157, 130 S. Ct. 2743, 2756 (2010). The district court properly

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[63] *Supra* notes 45-47 and accompanying text.

considered the public interest and correctly held that it would be served by the order for injunctive relief:

> 18. The public interest will not be disserved by an injunction. To the contrary, it is in the public's interest, as well as the Tribes' to accelerate the pace of barrier correction. All fishermen, not just Tribal fishermen, will benefit from the increased production of salmon. Commercial fishermen will benefit economically, but recreational fishermen will benefit as well. The general public will benefit from the enhancement of the resource and the increased economic return from fishing in the State of Washington. The general public will also benefit from the environmental benefits of salmon habit restoration.

Pet. App. 178a. *See also* Pet. App. 121a.

The district court and Court of Appeals were correct to rely on these public interest considerations in deciding to grant injunctive relief. As discussed above, commercial salmon fishing supports thousands of Washington jobs and many Washington communities, and increases in salmon available for harvest create additional economic opportunities in the local fishing economy. Sport fishers – and the industry surrounding sport fishing – will benefit substantially from increases in salmon populations as well. For port communities in Washington and Alaska, particularly smaller communities that are heavily reliant on fishing, healthy salmon runs are essential.

The injunctive relief ordered by the district court will lead directly to increases in salmon runs. More fish mean higher catch limits, longer seasons, and fewer streams that are closed for all or part of a year. More fish mean that fishing families who have stretched to buy their first commercial boat will not lose their investment to foreclosure. More fish mean more anglers who travel from far and wide for a chance to hook a prized Hoh River chinook or winter Skagit steelhead, and more local hotels, restaurants, and shops who will enjoy their patronage. More fish mean more river guides who can make ends meet and more parents who can share their love of fishing with their children. More fish mean port towns that are thriving instead of qualifying for federal disaster relief. More fish mean truly living up to the promise that salmon are both our inheritance and our children's future. In short, the public interest weighs strongly in favor of the injunctive relief granted by the district court. The district court did not abuse its discretion in granting injunctive relief to the Tribes.

CONCLUSION

Salmon are vital to fishing families and communities throughout Washington, Alaska, and the Pacific Northwest. As the district court found, removing culverts that prevent salmon from accessing key habitat across western Washington is one of the best ways to save these iconic fish. Amici respectfully submit that

the district court's injunction should be upheld in all respects.

Respectfully submitted,

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No. 17-269

In The
Supreme Court of the United States

STATE OF WASHINGTON,
Petitioner,

v.

UNITED STATES OF AMERICA, et al.,
Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit

BRIEF AMICUS CURIAE OF PACIFIC LEGAL FOUNDATION IN SUPPORT OF PETITIONER

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QUESTIONS PRESENTED

1. Whether the "right of taking fish, at all usual and accustomed grounds and stations *** in common with all citizens," reserved by respondent Indian Tribes in the Stevens Treaties, *e.g.*, Treaty of Medicine Creek, U.S.-Nisqually, art. III, Dec. 26, 1854, 10 Stat. 1133, imposes a duty on petitioner to refrain from building or maintaining culverts that directly block passage of a large number of anadromous fish to and from those grounds and that significantly diminish fish populations available for tribal harvest to that the Tribes cannot sustain a livelihood from their fisheries.

2. Whether the court of appeals correctly declined to apply the doctrines of waiver or laches to bar this suit, which addresses a treaty reserving rights and resources that pre-date the State, the scope of which has been in dispute for more than 100 years.

3. Whether the court of appeals correctly held that the district court did not abuse its discretion in enjoining petitioner to provide fish passage by addressing barrier culverts on a reasonable schedule necessary to ensure that petitioner acts expeditiously to remedy a violation of tribal treaty rights.

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INTEREST OF AMICUS CURIAE[1]

Founded in 1973, Pacific Legal Foundation (PLF) is the nation's oldest and largest nonprofit legal foundation that seeks to protect the right of private property and related liberties in courts throughout the country. In executing this mission, PLF and its attorneys have been frequent participants in environmental litigation. PLF seeks to encourage courts to adopt a balanced approach to environmental law, one which avoids interpretations that unreasonably elevate environmental concerns over other important values. To that end, PLF participated as amicus curiae in *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n* (*Fishing Vessel*), 443 U.S. 658, 661 (1979), arguing that the Stevens Treaties, which are here again at issue, should be interpreted so as to respect the constitutional right of non-Indian fishermen to earn a living. Br. Amicus Curiae of Pac. Legal Found. in Support of Pet'rs State of Washington, *et al.*, at 18-25, *Fishing Vessel*, 443 U.S. 658 (1978) (Nos. 77-983, 78-119, 78-139), 1978 WL 206841.

Directly relevant to the argument advanced in this brief, PLF participated as amicus curiae in *National Association of Home Builders (NAHB) v.*

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[1] Pursuant to this Court's Rule 37.3(a), all parties have consented to the filing of this brief. Letters evidencing such consent have been filed with the Clerk of the Court.

Pursuant to Rule 37.6, Amicus Curiae affirms that no counsel for any party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than Amicus Curiae, its members, or its counsel made a monetary contribution to the brief's preparation or submission.

Defenders of Wildlife, 551 U.S. 644 (2007). In *NAHB*, the Court held that the Endangered Species Act should not be interpreted as a super-statute which impliedly amends all existing federal obligations to re-orient them toward environmental purposes above all others. *See id.* at 662-64, 666. PLF is interested in this case because the Ninth Circuit's construction of the Stevens Treaties makes the same interpretive errors that PLF opposed in *NAHB* and which the Court there rejected.

INTRODUCTION AND SUMMARY OF ARGUMENT

In 1854 and 1855, Isaac Stevens, the United States Superintendent of Indian Affairs and Governor of the Washington Territory, negotiated several treaties with the Indian tribes dwelling around Puget Sound. App. to Pet. Cert. 68a. These eponymous Stevens Treaties set forth the federal government's responsibilities to the Tribes, including the recognition of "[t]he right of taking fish, at all usual and accustomed grounds and stations . . . together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed land." *See* J.A. 788a (Treaty of Medicine Creek).[2]

The Treaties have given rise to more than a century of court battles. In 1905, this Court held that the Treaties forbid non-Indian landowners from keeping Indians out of their traditional fishing places. *United States v. Winans*, 198 U.S. 371 (1905). Over the next several decades, the Court held that the

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[2] Identical, or almost identical, language is included in each of the other treaties.

Treaties also forbid the State of Washington from imposing fishing regulations and fees on the Tribes unless necessary for the conservation of fish, and only then in areas outside a reservation. *Tulee v. Washington*, 315 U.S. 681, 684-85 (1942); *Dep't of Game of Washington v. Puyallup Tribe*, 414 U.S. 44 (1973). Later, in *Fishing Vessel*, the Court ruled that the Treaties guarantee the right of Indians to take enough fish to satisfy a moderate standard of living, up to 50% of the annual harvest. *Fishing Vessel*, 443 U.S. at 686-87.

With the turn of a new century, the litigation continued unabated. In 2001, the federal government, joined by nearly two dozen Indian tribes, filed a new "sub-proceeding" in the still ongoing *Fishing Vessel* lawsuit. App. to Pet. Cert. 68a-69a. They alleged that the Treaties not only give the Tribes the right to seek up to 50% of the salmon runs, they also preclude non-Indians from taking actions that reduce the overall abundance of salmon to below the treaty-guaranteed amount. *Id.* Because state-owned and maintained road culverts[3] allegedly reduce salmon abundance to the point that the Tribes cannot obtain a moderate living therefrom, the federal government and the

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[3] Culverts are structures that allow streams to pass under roads, and range from simple pipes to "stream-simulation" designs that mimic natural stream conditions. Washington began building these culverts in significant numbers approximately a century ago, following Congressional invitation to participate in federal-aid highway programs. *See* Act of July 11, 1916, ch. 241, 39 Stat. 355; 1917 Wash. Sess. Laws, page no. 260 (codified as amended Wash. Rev. Code § 47.04.050). The federal programs provided the states with specified designs for highway culverts and distributed engineering guidance to state highway departments. David R. Levin, *Federal Aspects of the Interstate Highway Program*, 38 Neb. L. Rev. 377, 393-96 (1959).

Tribes argued that the Treaties require the culverts' removal. *Id.*

The district court agreed, ruling that the culverts must be replaced or suitably enhanced, despite the potential billion-dollar price tag to be paid by Washington (and ultimately the state's taxpayers). *Id.*

The Ninth Circuit affirmed, the panel holding that the culverts violate Washington's obligations to the Tribes under the Treaties' fishing clause. *Id.* at 117a-118a. In so holding, the court rejected arguments regarding estoppel, sovereign immunity, federalism, and cost-benefit analysis. *See id.* Although the court gave lip-service to the desire to avoid construing the Treaties to impose on Washington and its non-Indian communities an "environmental servitude"[4] in favor of Indian interests, the panel decision identifies no logical stopping point to its rationale that would avoid such a servitude. *Id.* at 30a-31a, 41a.

In *NAHB*, this Court rejected an analogous—and equally erroneous—interpretation of the Endangered Species Act, one that would have converted that Act into a super-statute, impliedly amending all federal agency obligations to serve environmental goals above any others. *See NAHB*, 551 U.S. at 662-64, 666. The Court instead adopted a much more balanced interpretation, according to which the relevant

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[4] The Ninth Circuit coined the term "environmental servitude" in an earlier proceeding in this case. *See United States v. Washington*, 694 F.2d 1374, 1382 (9th Cir. 1982). The court used it to describe what would happen if the Stevens Treaties were interpreted too broadly—ironically, precisely what the decision below does.

Endangered Species Act obligation would apply only to actions for which an agency has discretion to modify so as to protect species and their habitat. Driven by a markedly different attitude, the Ninth Circuit construed the Stevens Treaties in the strict manner that *NAHB* eschews—to preclude *any* action that would have the effect (regardless of intention) of depressing salmon abundance in a way prejudicial to the Tribes' fishing rights.

Drawing a parallel between *NAHB* and this case, the Court should reject the Ninth Circuit's skewed interpretation and instead adopt a construction of the Treaties that would limit fishing rights liability to those actions *intended* to reduce salmon abundance. This balanced approach, similar to that adopted in *NAHB*, will respect Indian fishing rights. But critically, it also will respect other values, such as the securing to all citizens—Indian and non-Indian alike—safe and efficiently maintained public thoroughfares.

ARGUMENT

I.

In *National Association of Home Builders (NAHB) v. Defenders of Wildlife*, the Court Rejected a "Super-Statute" Interpretation of the Endangered Species Act Because Such an Interpretation Would Have Broadened the Act to an Absurd Reach

In *NAHB*, a coalition of environmental groups challenged the decision of the Environmental Protection Agency to transfer permitting authority to the State of Arizona under the Clean Water Act's National Pollutant Discharge Elimination System, 33

U.S.C. § 1342(b). *NAHB*, 551 U.S. at 649. The groups contested the transfer on the ground that the Endangered Species Act barred EPA from transferring permitting authority without a prior determination of the transfer's anticipated effects on protected species and their habitat. *Id.* The groups relied on the Act's Section 7(a)(2), which provides that federal agencies "shall . . . insure" that their actions do not jeopardize the continued existence of protected species, or destroy or adversely modify their critical habitat. 16 U.S.C. § 1536(a)(2). To fulfill that obligation, Section 7(a)(2) requires agencies first to consult with designated federal wildlife officials to determine the likely effects of their actions on species and habitat. *See id.* In *NAHB*, EPA argued that such consultation was inappropriate to the question of transferring permitting authority, because the Clean Water Act provides an exhaustive list of criteria to be considered when making that decision, and "effects to endangered species" is not one of them. *Id.*

The Ninth Circuit disagreed. *See Defenders of Wildlife v. U.S. Environmental Protection Agency*, 420 F.3d 946, 979 (9th Cir. 2005), *rev'd sub nom. National Ass'n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007). The court held that, notwithstanding the Clean Water Act's seemingly exclusive criteria, the Endangered Species Act requires EPA to insure that permitting transfers do not jeopardize protected species. *See* 420 F.3d at 971. That conclusion followed, in the Ninth Circuit's view, for two principal reasons. First, federal agencies cannot effectively "insure" that their actions will avoid jeopardy to species unless "the authority conferred on agencies to protect listed species goes beyond that conferred by agencies' own governing statutes." *Id.* at 964. Second,

the Clean Water Act and the Endangered Species Act share "complementary objectives," *see id.* at 967, such that compliance with the former "cannot relieve the EPA of its independent obligations under" the latter, *id.* at 971. Thus, the *NAHB* panel's construction of the Endangered Species Act would, as ably described by the principal dissent from the denial of rehearing en banc, "modify not only EPA's obligation under the [Clean Water Act], but *every* categorical mandate applicable to *every* federal agency." *Defenders of Wildlife v. U.S. E.P.A.*, 450 F.3d 394, 399 n.4 (9th Cir. 2006) (Kozinski, J., dissenting from denial of rehearing en banc).

This Court granted review and reversed. Rejecting the Ninth Circuit's super-statute construction, the Court ruled that the Endangered Species Act does not apply to EPA's decision to transfer Clean Water Act permitting authority to the states because that process is governed by the Clean Water Act's exclusive criteria. *NAHB*, 551 U.S. at 673. To hold otherwise would result in the Endangered Species Act's partial overriding of every federal statute that mandates agency action that may affect protected species and their habitat. *See id.* at 663-64. In particular, adding an endangered species criterion to the Clean Water Act permitting transfer process, as the Ninth Circuit's decision purported to do, would impermissibly rewrite the statute, a result the Court held to be unreasonable. *See id.* at 666-67, 669. In contrast, the reasonable construction that the Court ultimately adopted—conditioning application of Section 7(a)(2) on the presence of agency discretion—would strike a better balance between the two statutes, because it would "guide agencies' existing discretionary authority [without] overrid[ing] express

statutory mandates." *Id.* at 666. Thus, the Court's reasonable interpretation of the Endangered Species Act appropriately balanced that statute's particular environmental purposes with the sometimes countervailing policies embodied in the Clean Water Act and other federal statutes.

II.

The Ninth Circuit's Construction of the Stevens Treaties Commits the Same Interpretive Errors That This Court Rejected in *NAHB*

The Ninth Circuit's construction of the Stevens Treaties imposes a de facto environmental servitude on Treaty areas, such that all public and private actions therein must be re-calibrated to avoid harming salmon populations. In *NAHB*, the Ninth Circuit construed the Endangered Species Act to impose a similar environmental servitude on all federal agency action. Just as this Court rejected that extravagant interpretation in *NAHB*, 551 U.S. at 666-67, so too should the Court reject its re-deployment here.

First, just like the lower court ruling in *NAHB*, the ruling below does not identify any logical stopping point to the environmental duties it creates. By failing to cabin those obligations, the Ninth Circuit's decision provides a broad basis for the judicial creation of environmental duties to govern any activity that affects wildlife or habitat in areas governed by similar Indian treaties. *See* App. to Pet. Cert. 10a-11a. For example, the decision could be used to regulate impacts to any traditionally hunted (and Indian-treaty-protected) animal, including deer, elk, bears, and birds. *Id.* at 28a-29a. Those impacts

could be caused by run-of-the-mill productive activities, such as dams, logging, grazing, driving, and construction. *Id.* As Judge O'Scannlain frankly explained in his dissent from denial of rehearing en banc, "the panel's decision opens a backdoor to a whole host of potential federal environmental regulation-making." *Id.* at 31a.

Second, just like the lower court ruling in *NAHB*, the decision below makes the critical error of absolutizing the Treaties' fishing clause. The Ninth Circuit's decision in *NAHB* failed to acknowledge the legitimate reasons as to why Congress would not have wanted EPA to take endangered species impacts into account when deciding whether to transfer Clean Water Act permitting authority to the states. *See Defenders of Wildlife v. U.S. E.P.A.*, 450 F.3d at 402 & n.2 (Kleinfeld, J., dissenting from denial of rehearing en banc). So too, the decision below fails to take account of competing concerns that would handily justify a less sweeping interpretation of the Treaties' fishing clause. For example, the decision gives little attention to the impacts to state and local governments' budgets and infrastructure. In just this case alone, the district court's culvert order will cost Washington hundreds of millions of dollars (if not more) to implement. *See* App. to Pet. Cert. at 118a-119a. Yet the panel decision affirming that order fails to take into account more cost-effective methods of improving salmon abundance, such as trucking fish above any culvert blockages. *Id.* at 31a-32a; Kat Kerlin, *Disconnected Salmon: Catching a Ride Over Dams*, UC Davis (Sept. 21, 2017).[5]

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[5] *Available at* https://www.ucdavis.edu/news/disconnected-salmon-catching-ride-over-dams/.

And third, just like the lower court ruling in *NAHB*, the decision below raises an immense risk of increased litigation. Under the Endangered Species Act, private parties may bring citizen suits to challenge federal agencies' failure to abide by their consultation obligations, *see* 16 U.S.C. § 1540(g)(1)(A)—indeed, *NAHB* started off in part as just such an action, *see Defenders of Wildlife*, 420 F.3d at 955. Had the Ninth Circuit's decision in that case been upheld, the litigation floodgates would have been opened by lawsuits challenging all manner of federal activity that had undergone no consultation. Similarly, upholding the Ninth Circuit's overbroad construction of the Stevens Treaties would result in a significant increase in liability as well as lawsuits. By failing to establish which human-caused reductions in fish populations would trigger liability, the panel decision reveals to enterprising litigants a treasure trove of potential treaty rights claims. App. to Pet. Cert. 10a-11a, 19a. Nor is there any reason to think that such claims would be directed toward government entities only. *See Fishing Vessel*, 443 U.S. at 692 n.32 (non-party fishermen may be subject to the district court's enforcement of the Treaties' fishery clause).

III.

The Court's Resolution of the Interpretive Question in *NAHB* Should Guide the Court's Analysis Here

The parallels discussed in the preceding section demonstrate that the errors which led this Court to reverse in *NAHB* should lead the Court to the same outcome here. Similarly, the reasonable construction that this Court adopted in *NAHB*—which balances endangered species protection with other worthy federal objectives—should guide the Court's analysis of the Stevens Treaties. In *NAHB*, the Court harmonized the Endangered Species Act with the Clean Water Act's permitting transfer provision—as well as with other categorical obligations—by construing the Endangered Species Act's consultation provision to apply only to actions over which federal agencies have some measure of discretion. *NAHB*, 551 U.S. at 673.

Similarly here, the Court can reasonably balance Tribal and non-Tribal interests by construing the Treaties' fishing clause to prohibit only those actions that have the primary purpose of reducing salmon abundance. Such a construction would avert the lower courts' anti-culvert campaign, as even the federal government and the Tribes acknowledge that Washington's road construction and maintenance program is not intended to frustrate the Tribes' fishery rights.[6] *See* App. to Pet. Cert. 95a, 27a-28a

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[6] In fact, Washington recognizes that salmon populations are an important resource and has sought to protect salmon through various state programs. *See generally* Washington State Recreation and Conservation Office, *Washington's Efforts to*

n.8. Yet, while respecting the interests of non-Indians, keying the Treaties' fishing clause to "intent" would preserve substantial protection for the Tribes. For example, nothing in this interpretation would alter the Court's prior rulings that forbid Washington and other entities from blocking access to traditional fishing grounds, *see Winans*, 198 U.S. at 382, or from enforcing unduly burdensome fish and game laws against the Tribes, *see Tulee*, 315 U.S. at 684-85. Because Washington's program of construction and maintenance of road culverts is not intended to reduce salmon abundance, its implementation cannot violate the Stevens Treaties. This conclusion respects the Tribes' interests in a healthy salmon fishery, while vindicating the interests of all Washington citizens—Indian and non-Indian alike—in safe and efficiently maintained roadways.

CONCLUSION

The judgment of the court of appeals should be reversed.

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Respectfully submitted,

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No. 17-269

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ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

BRIEF OF WASHINGTON STATE AND LOCAL OFFICIALS (CURRENT AND FORMER) AS *AMICI CURIAE* IN SUPPORT OF RESPONDENTS

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INTEREST OF *AMICI CURIAE*[1]

Amici are a bipartisan group of elected Washington officials (current and former) at both the state and local level. They are deeply familiar with the problem of dwindling salmon stocks, and have first-hand experience grappling with intertwined federal and state laws that mandate protection of

[1] This brief is filed with the consent of all parties. No counsel for either party authored this brief in whole or in part, nor did any party or other person make a monetary contribution to the brief's preparation or submission.

salmon species and their habitat. *Amici* also have experience investing in and overseeing habitat conservation and restoration efforts, including barrier culvert removal, and have worked in partnership with Indian tribes who share the common goal of ensuring the sustainability of Washington's salmon resources. *Amici* have done so despite facing budget constraints similar to those invoked by the State: They have worked collaboratively through watershed planning efforts and state salmon recovery forums to leverage federal, state, and local resources, and have advocated for new funding models when necessary.

Amici offer their perspective to inform the Court of the longstanding commitment of state and local officials in Washington to the protection and restoration of salmon stocks, and to highlight the efforts of cities, counties, and other local entities in working to ensure that barriers to fish passage are removed and salmon populations are given all possible opportunities to thrive. The State's position in this case is fundamentally inconsistent with the shared public interest in those efforts.

Amici include:

- Dow Constantine, Executive of King County, the most populous county in Washington. Before serving as County Executive for the last nine years, Mr. Constantine was elected to serve in the King County Council, Washington State House of Representatives, and the State Senate.

- Phil Anderson, member of the Pacific Salmon Commission representing Washington and Oregon and Chairman of the Pacific Fishery Management Council. Mr. Anderson worked in the Washington Department of Fish and Wildlife for 21 years, serving as Director from 2008 to 2015.
- Brian J. Boyle, former Washington State Commissioner of Public Lands. Mr. Boyle served three four-year terms as the elected head of the Washington Department of Natural Resources.
- Jim Buck, former member of the Washington State House of Representatives (24th District). Mr. Buck, who served six terms, was Chair of the Natural Resources Committee and served as a member of the Governor's Council on Natural Resources.
- Bruce Dammeier, Executive of Pierce County, the second most populous county in Washington State. Prior to be being elected Pierce County Executive in 2016, Mr. Dammeier served as a member of the Washington State Senate and in the State House of Representatives.
- Robert J. Drewel, former Executive of Snohomish County. In addition to serving as County Executive for 12 years, Mr. Drewel served as Executive Director of the Puget Sound Regional Council from 2002 until 2014.

- Joe Fitzgibbon, Washington State Representative. Mr. Fitzgibbon is Chair of the Environment Committee and a member of the Appropriations and Agriculture and Natural Resources committees.
- Karen Fraser, former Washington State Senator. In addition to 24 years of service in the State Senate, Ms. Fraser served in the State House of Representatives, on the Thurston County Board of County Commissioners, and as President of the Washington State Association of Counties. Ms. Fraser was Mayor of Lacey, Washington from 1976 until 1980.
- Joe McDermott, Chair of the King County Council. Mr. McDermott previously represented West Seattle, Burien, White Center, and Vashon and Maury Islands in the Washington State Legislature for a decade.
- Ralph Munro, former Secretary of State of Washington. In addition to serving as Secretary for five elected terms (1980-2001), he served as Chair of the Shared Strategy for Puget Sound Board of Directors, a bipartisan salmon recovery effort.
- Debbie Regala, former Washington State Legislator. Ms. Regala served in the State Senate from 2001-2013 and in the State House of Representatives from 1995-2000, including as Co-Chair of the Committee on Natural Resources.

- Ron Sims, former Executive of King County. In addition to serving 12 years as King County's Executive, Mr. Sims also served as Deputy Secretary for the U.S. Department of Housing and Urban Development.

INTRODUCTION AND SUMMARY OF ARGUMENT

Healthy salmon stocks are vital to Washington's economy and culture. Salmon fisheries bolster the State's coffers, furnish tens of thousands of jobs, and provide recreation and nourishment to many residents. Simply put, salmon are essential to Washington's way of life.

Despite their undeniable value, salmon stocks have declined precipitously over the last several decades. The Washington Legislature regards the degradation of this vital resource as nothing short of a "crisis," which calls for an "immediate[]" response. WASH. REV. CODE § 77.85.005 (Salmon Recovery Act). The response envisioned by the Legislature depends on action at the local level, as well by the State, to protect vulnerable watersheds and the fish habitat therein. Unlike local and tribal governments, however, the State has not held up its end of the bargain.

Even in the face of budget constraints, local governments have taken up the mantle of restoring Washington's dwindling salmon stocks. King County, for example, works with federal and state agencies, Indian tribes, cities, and non-profit organizations to make significant investments in implementation of

salmon conservation and recovery plans, including removal of fish passage barriers. These efforts have yielded positive results—namely, the completion of hundreds of conservation projects and the restoration of salmon habitat, including access to creeks and side channels that were previously disrupted by barrier culverts. The success of these efforts stands as proof that, by working collaboratively, federal, state, tribal, and local entities can serve the common public interest, restoring degraded salmon populations and habitat to a healthy sustainable condition.

The State's position in this case threatens that common public interest. Throughout this litigation, the State has contended that it has no responsibility to ensure fish passage and could "block every salmon-bearing stream into Puget Sound" without violating treaties signed by Indian tribes that ensured a permanent right to take fish that had sustained the tribes for centuries. Pet. App. 8. That argument flouts the "legal and moral obligation" the State has to the tribes, as well as to Washington residents who have likewise come to depend on salmon for economic and nutritional sustenance. WASHINGTON DEP'T OF FISH AND WILDLIFE, FISH PASSAGE: A SENSE OF URGENCY ("FISH PASSAGE").[2] It also unwinds decades of work with local and tribal governments to protect and restore habitats across the Puget Sound region.

As *amici* can attest, resolving Washington's "salmon crisis" requires leadership. That leadership

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[2] https://wdfw.maps.arcgis.com/apps/Cascade/index.html?appid=e3cc75ec9da04bedb732ab941a5911b8.

falters when the State chooses to wage legal battles rather than working cooperatively with federal, local, and tribal officials towards their common goal. As Washington's own Commissioner of Public Lands put it, rather than "fighting *** over who should do what," the State should be joining local and tribal officials in "rolling up [their] sleeves, standing shoulder to shoulder and investing *** limited time, energy and resources towards saving salmon for future generations." App. to Br. of Resp't Tribes in Opp'n at 1a (Letter from Hilary Franz, Washington Commissioner of Public Lands, to Bob Ferguson, Washington Attorney General (Aug. 11, 2017)) ("Franz Letter").

ARGUMENT

REPLACING BARRIERS TO SALMON PASSAGE SERVES THE PUBLIC INTEREST

A. Healthy Salmon Populations Benefit All Washingtonians

Since time immemorial, Indian tribes in the Pacific Northwest have been "heavily dependent for their livelihoods on runs of salmon *** that c[o]me up the rivers in great numbers to spawn." *Puyallup Tribe, Inc. v. Department of Game of Wash.*, 433 U.S. 165, 179 (1977) (Brennan, J., dissenting in part). "[N]ot much less necessary to the existence of the Indians than the atmosphere they breathed," these anadromous fish have been central to the tribes' cultural, culinary, and economic identity. *United States v. Winans*, 198 U.S. 371, 381 (1905). Salmon were also central to the series of treaties the tribes

signed with the United States relinquishing the bulk of their territory. *See Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658 (1979).

Today, reliance on salmon is not limited to Indian tribes. Over the roughly 160 years since the tribes relinquished their ancestral lands, non-Indian settlers in those territories increasingly came to share in a "unifying dependence" on this precious resource. *Washington State Commercial*, 443 U.S. at 664. Salmon are essential to Washington's contemporary economy and culture, with commercial and recreational fisheries providing tens of thousands of jobs, over a half billion dollars in annual personal income, and recreation and sport to thousands of Washingtonians. *See* Washington Dep't of Fish and Wildlife, *Making Way for Salmon*, YOUTUBE (published Jan. 26, 2017) ("*Making Way for Salmon*")[3]; *see also* State Br. 9.

The State does not deny the vital role salmon play in the lives of its citizens. Even as it challenges the district court's injunction, the State concedes that its "own self-interest and responsibility to its residents" demand the renewal of salmon habitats. Br. 41. That concession is not surprising: Outside this litigation, state officials have long recognized the importance of maintaining healthy salmon populations. According to the Washington Department of Fish and Wildlife, "[s]almon are

[3] https://www.youtube.com/watch?v=X7z5anXzm0k.

important to all of us in Washington. They matter socially, they matter culturally, and they matter economically." *Making Way for Salmon* at 00:10-00:17. As the Governor put it, the State has a "moral obligation to restore wild salmon," in addition to a legal one, because "[e]very investment we make in salmon recovery is an investment we make in our future." FISH PASSAGE, *supra*.

As this bipartisan group of *amici* reflect, the commitment to salmon restoration crosses party lines. As a Republican state representative recently observed, "salmon recovery is *** an obligation" that requires "efficient[] and aggressive[]" action because nothing less than "[t]he future of [the] state" depends on it. J.T. Wilcox, *Remove Barriers to Preserve Salmon Runs for Future Generations*, THE SEATTLE TIMES (Feb. 6, 2018).[4]

B. The Obligation To Protect And Restore Salmon Habitat Is Ingrained In State Law

Consistent with the broad recognition that restoring salmon runs is essential to Washington's future (but contrary to the State's actions in relation to this case), state law is replete with legislative commands reflecting Washington's commitment to rejuvenating salmon stocks. *See, e.g.*, WASH. REV. CODE ch. 77.85, *et seq.* (Salmon Recovery Act); *id.* ch. 77.95, *et seq.* (Salmon Enhancement Program); *id.*

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[4] https://www.seattletimes.com/opinion/remove-barriers-to-preserve-salmon-runs-for-future-generations/

ch. 77.55, *et seq.* (Construction Projects in State Waters). Animating these provisions is the recognition that "repeated attempts to improve salmonid fish runs throughout the state of Washington have failed to avert" their depletion, which "threaten[s] the sport, commercial, and tribal fishing industries as well as the economic well-being and vitality of vast areas of the state." *Id.* § 77.85.005. When it passed the Salmon Recovery Act, the Washington Legislature made clear that the State's "salmon crisis" demanded an "immediate[]" response. *Id.*

The State's solution to the problem of depleted salmon runs depends on a "coordinated framework" in which "[l]ocal and regional recovery activities" play an "integra[l]" role. WASH. REV. CODE § 77.85.005. In findings supporting the Salmon Recovery Act, the State Legislature explained that "it is in the interest of the citizens of the state of Washington for the state to retain primary responsibility for managing the natural resources of the state, rather than abdicate those responsibilities to the federal government." *Id.* In the Legislature's view, this objective is best served "by integrating local and regional recovery activities into a statewide strategy that can make the most effective use of provisions of federal laws allowing for a state lead in salmon recovery, delivered through implementation activities consistent with regional and watershed recovery plans." *Id.* "A strong watershed-based locally implemented plan," the Legislature concluded, "is essential for local, regional, and statewide salmon recovery." *Id.*

This watershed-based, locally focused approach is evident throughout state law. Specifically, Washington laws require cities and counties to designate, plan for, and protect salmon populations and their habitat, and to do so in coordination with affected Indian tribes. For example, the Growth Management Act mandates protection of "critical areas," including fish and wildlife conservation zones, and directs cities and counties to "give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries." WASH. REV. CODE § 36.70A.172(1). The Act's implementing rules require that agencies utilize "best available science" in a way that integrates "salmon recovery efforts," and apply "special consideration[s]" through "measures that protect" not only anadromous fish but their habitat. WASH. ADMIN. CODE §§ 365-195-900, -925.

The Shoreline Management Act is similarly premised on the State's "cooperat[ion] *** with local governments." WASH. REV. CODE § 90.58.250(2). Rules implementing that Act require State and local officials to work "in conjunction with *** affected Indian tribes, [to] classify critical saltwater habitats and protect and restore seasonal ranges and habitat elements" in order to ensure that endangered, threatened, and priority species will "maintain [their] population[s] and reproduce over the long term." WASH. ADMIN. CODE § 173-26-221(2)(c)(iii)(B). Implementing rules further direct that "critical areas" are to be managed for "the protection of existing ecological functions and [the] *** restoration

of degraded ecological functions," *id.* § 2(b)(iv), and that "[r]estoration planning *** include incentives and other means to restore water connections that have been impeded by previous development," *id.* § 2(c)(iv)(B).

The Washington State Forest Practices Act also encourages state officials to develop watershed plans in collaboration with Indian tribes, this time with an eye towards addressing the cumulative impact of forest practices, including roads, on fish and water. *See* WASH. REV. CODE § 76.09.010.

C. Counties And Cities Have Implemented State Law Mandates Regarding The Protection And Restoration Of Salmon Populations And Their Habitat

No matter how much ink is spilled writing laws to protect and restore dwindling stocks, Washington's "salmon crisis" will continue unabated without sustained effort and leadership. Despite the State's recalcitrance, Washington's cities and counties are doing their part to ensure the sustainability of this vital resource.

King County, Washington's largest county, exemplifies these efforts. Among other things, King County has passed ordinances aimed at protecting "critical areas" from degradation, safeguarding the shoreline and its abundant natural resources, responsibly managing stormwater, and ensuring that clearing and grading land for development is done responsibly, with minimal harm to the environment.

See KING CTY. CODE § 21A.24 (Critical Areas); *Id.* tit. 9, *et seq.* (Surface Water, Stormwater and Groundwater Management); *Id.* § 16.82 (Clearing and Grading).

In addition to local ordinances, King County's state-law mandated focus on habitat restoration is evident in its Comprehensive Plan—a long-term policy planning document that guides land use and development regulations throughout the County. The Comprehensive Plan affirms the County's commitment to salmon recovery and also reflects its recognition of the particular obligations owed to Indian tribes. "The protection and recovery of salmonid species that are listed under the Endangered Species Act and encompassed by tribal treaty rights," the Plain affirms, "are and will continue to be a significant priority for King County." 2016 KING COUNTY COMPREHENSIVE PLAN at 5-68 (updated Dec. 4, 2017). The Plan further states that "[t]he listing of a species under the Endangered Species Act and decline of tribal treaty right protected species are cause for great concern, because wild Pacific salmon have great environmental, cultural, economic, nutritional, recreational and symbolic importance to local communities, in particular tribal communities, in the entire Puget Sound region." *Id.*

Reflecting its commitment to tribal communities, King County "[f]ocus[es] on federally listed salmonid species and declining stocks protected under tribal treaty rights first, tak[ing] an ecosystem

approach to habitat management[,] and seek[ing] to address management needs for other species over time." 2016 KING COUNTY COMPREHENSIVE PLAN at 5-69. The County is also committed to "participat[ing] in the Water Resource Inventory Area [(WRIA)] salmon recovery plan implementation efforts and in other regional efforts to recover salmon and the ecosystems they depend on." *Id.*

The County's past conservation and restoration projects demonstrate its effective implementation of these policies. When the federal government listed Puget Sound Chinook salmon as threatened under the Endangered Species Act in 1999, local governments in King County worked together to address the problem through a coordinated, regional approach. King County formed two watershed-based salmon recovery forums—WRIAs—and participated in two others, to guide multi-jurisdictional partnerships. WASH. REV. CODE. § 77.85.090. Those partnerships put in place science-based salmon recovery plans driven by a commitment to building sustainable, harvestable salmon populations. The County's efforts yielded impressive results: Combined, the four WRIAs have completed hundreds of conservation projects, representing an investment of approximately $300 million.

D. Removing Barriers To Fish Passage Is A Critical Component Of Salmon Restoration Efforts

The State observes in its brief that existing culvert designs are "often difficult for fish to pass

because they increase[] water velocity or turbidity [or] be[come] blocked by debris." Br. 19. For that reason, the State explains, it is "identifying fish-barrier culverts under state highways and replacing them." *Id.*

The State's acknowledgment that at least some barrier culverts require replacement is in line with longstanding policy and practice. Two decades ago, the State's Fish Passage Task Force reported that barrier culverts are a "key factor" in the degradation of wild salmon populations, concluding that, "the creation of new barriers must be prevented and the rate of barrier correction must be accelerated if Washington wild salmon *** stocks are to recover." JA 147a. Around the same time, Washington's Department of Fish and Wildlife (WDFW) and State Department of Transportation (WSDOT) reported that WSDOT culverts alone blocked an area of approximately 1.6 million square meters of fish habitat, and estimated that replacement of those culverts would yield 200,000 additional adult salmon each year.[5] JA 430a; *see* Pet. App. 109a. In addition, the State's Joint Natural Resources Cabinet published a report warning that "[u]nnatural physical barriers interrupt adult and juvenile salmonid passage in many streams, reducing productivity and eliminating some populations. *** These structures block fish access to an estimated 3,000 miles of freshwater spawning and rearing

[5] This number is based on a partial inventory. The actual number is far higher.

habitat." STATE OF WASHINGTON, EXTINCTION IS NOT AN OPTION: STATEWIDE STRATEGY TO RECOVER SALMON II. 23-24 (Nov. 1999)[6]; *see* Pet. App. 160a.

Consistent with the recognition that barrier culverts degrade salmon stocks, Washington passed laws intended to ensure that fish can complete their normal migration to and from the Pacific Ocean unimpeded. Specifically, Washington law mandates the "expedite[d] *** removal of human-made or caused impediments to anadromous fish passage," WASH. REV. CODE § 77.95.160(2)(a), "based on the principle of maximizing habitat recovery," *id.* § 77.95.180(1)(b); *see also id.* § 77.57.030. (imposing fish-way requirements, including obligation to allow fish passage on non-state barrier culverts). Despite these legislative mandates, however, the State's efforts at fish barrier removal are woefully inadequate. At its current pace, the State will not complete replacement of its blocking culverts for over 100 years. Pet. App. 160a-161a, 163a.

E. Localities Are Taking Steps To Remove Barriers To Fish Passage

The State's breach of its obligations to remove barriers to fish passage stands in stark relief to the proactive efforts of cities, counties, tribal governments, and other local entities.

King County is again illustrative. In addition to long-standing participation in collaborative WRIA-

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[6] https://www.rco.wa.gov/documents/gsro/1999StatewideStrategyRecoverSalmon.pdf.

based salmon recovery efforts, the County is working with federal, state, tribal, and city officials to develop a fish passage program for watersheds within its jurisdiction. This program will identify barriers to fish passage, assess habitat and fish population restoration potential, coordinate with other protection and restoration actions, and sequence and accelerate investments to achieve the greatest benefits for salmon recovery.

The County's financial investment in this effort has been substantial. Not including investments made through the WRIAs, King County is investing more than $7 million to remove barrier culverts in the current biennium. Much more investment will be made.

Critically, the County is also spearheading public-private-tribal partnerships to identify non-state-owned culverts that impede salmon passage and to invest funds in their replacement. Recently, the County partnered with the private owner of land encompassing a portion of Ebright Creek in the City of Sammamish, where an undersized culvert had blocked fish passage for 50 years. After the culvert was replaced, kokanee salmon runs returned almost immediately, and that productivity "created the cornerstone" of the area's salmon recovery effort. *Making Way for Salmon* at 3:15-4:55.

Floodplain restoration projects in King County also provide a striking example of the potential benefits to salmon populations from removing barriers to fish passage. The Rainbow Bend

Floodplain Restoration Project on the Cedar River reduced flood hazards and reconnected 40 acres of open space and floodplain. The project created side channel habitat for spawning Sockeye and Chinook salmon and also created important backwater rearing habitat for juvenile salmon. The success of the project was quickly evident: Salmon immediately began using the re-opened constructed and restored habitat for spawning and rearing.

F. The State's Position Undermines Efforts To Protect And Restore Salmon Habitat And Salmon Populations

Successes like those at Ebright Creek and the Cedar River, as well as broader collaborative efforts to protect and restore salmon habitat through WRIA forums, reinforce *amici*'s commitment to working cooperatively with federal, state, and tribal partners to restore salmon runs. *Amici* share the State's view that maintaining salmon populations is vital to Washington's cultural, environmental, and economic vitality, and also share the belief that barrier removal is critical to the health of salmon populations. *Amici*, however, do not share the State's refusal to live up to those words in this case.

That is because the State's truculent position threatens to undermine critical restoration efforts. The State asserts that non-state owned barriers might prevent salmon passage even if the state-owned culverts are replaced. Br. 21, 53. But that assertion ignores the extensive local government efforts, in conjunction with tribes and private actors

(as documented above), that are already underway to coordinate protection and restoration of habitat, including the removal of non-state-owned barriers. Likewise, the State's assertion that it is being forced "to bear the entire cost of replacing culverts," Br. 58, overlooks local efforts (not to mention that a "large portion of WSDOT's funding comes from the United States," Pet. App. 171a).

As the Commissioner of Public Lands wrote to the Attorney General, the State's appeal to this Court represents "yet another chapter of fighting *** over who should do what." Franz Letter at 1a, *supra*. In place of that litigious approach, the State should be "work[ing] collectively and focus[ing] on actions that address and actively aid the many concerns that *** tribal governments—and so many *** non-tribal residents—have *** rais[ed] for years." *Id.* at 1a-2a. Only sustained cooperation between the State and tribal and local governments will resolve the crisis that threatens Washington's way of life. The State owes no less to its residents—present and future—and to the tribes that were promised that the salmon that sustained them for centuries would endure for generations to come.

CONCLUSION

For the foregoing reasons, the decision of the court of appeals should be affirmed.

Respectfully submitted.

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April 2, 2018

No. 17-269

IN THE

Supreme Court of the United States

STATE OF WASHINGTON,

Petitioner,

v.

UNITED STATES OF AMERICA, ET AL.,

Respondents.

ON WRIT OF CERTIORARI TO
THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

MOTION FOR LEAVE TO FILE AMICUS BRIEF AND BRIEF OF WASHINGTON STATE ASSOCIATION OF COUNTIES AND ASSOCIATION OF WASHINGTON CITIES AS AMICI CURIAE IN SUPPORT OF PETITIONER

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MOTION FOR LEAVE TO FILE AMICI CURIAE BRIEF

The Washington State Association of Counties ("WSAC") and The Association of Washington Cities ("AWC") seek leave to file an amici curiae brief in support of the petitioner in this case. *See* Sup. Ct. R. 37.2(b). Petitioner filed a blanket consent. The letter is on file with the Clerk's Office. Respondents have not consented.

I.

The undersigned are organizations with significant interests in the issues presented by this case. The Washington State Association of Counties is a non-profit, non-partisan organization that represents Washington's counties before the state legislature, the state executive branch, and regulatory agencies. Although membership is voluntary, WSAC consistently maintains 100 percent participation from Washington's 39 counties, 14 of which are located within the Case Area that is the subject of this litigation ("Case Area Counties").

The Association of Washington Cities is a private non-profit corporation that represents Washington's cities and towns before the state legislature, the state executive branch, and regulatory agencies. Membership is voluntary, but the association includes all of Washington's 281 cities and towns. There are 131 cities and towns in the Case Area Counties with an approximate total population of 3.4 million residents.

Like the State of Washington, Case Area political subdivisions were not signatories to the Treaties, but they are responsible for the maintenance and construction of roads and culverts, of which there are thousands within the Case Area. WSAC and AWC have concerns that the Tribes may seek to extend the lower court's interpretation of their treaty rights to culverts of other political subdivisions, as well as numerous other activities that potentially impact salmon supply.

WSAC and AWC wish to assist the Court's review in this case by discussing the implications of the Ninth Circuit's beyond the parties, including the unlikelihood of the Eleventh Amendment operating as a sufficient check against the breadth of the Ninth Circuit's decision and accompanying equitable relief.

II.

Supreme Court Rule 37 permits filing of amicus curiae briefs. The rule requires that potential amici provide notice to, and obtain written consent from, the parties before the amicus brief is due. *Id.* If the parties do not consent, the rule permits potential amici to seek leave to file from the Court itself. Sup. Ct. R. 37.2(b).

Counsel for amici reached out to counsel for Respondents on March 2, 2018 requesting authorization for the filing of this amicus brief. Counsel did not receive a response from the Solicitor General's Office. On March 4, 2018, undersigned counsel received a response from John Sledd, lead counsel for the Tribes,

reporting that he would not be able to obtain consent from all Tribes involved by amici's filing deadline.

Because counsel have been unable to secure consent from the respondents, amici request that this Court permit it to file a brief in support of the petitioner.

Respectfully submitted,

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INTEREST OF AMICI CURIAE[1]

The Washington State Association of Counties ("WSAC") is a non-profit, non-partisan organization that represents Washington's counties before the state legislature, the state executive branch, and regulatory agencies. Although membership is voluntary, WSAC consistently maintains 100 percent participation from Washington's 39 counties, 14 of which are located within the Case Area that is the subject of this litigation.[2]

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[1] A Motion for Leave to File accompanies this amicus brief. No counsel for a party authored the brief in whole or in part. No party, counsel for a party, or any person other than amici and its counsel made a monetary contribution intended to fund the preparation or submission of the brief.

[2] Washington Counties located within the Case Area are Clallam, King, Kitsap, Grays Harbor, Island, Jefferson, Lewis (partially), Mason, Pierce, San Juan, Skagit, Snohomish, Thurston, and Whatcom.

[3] Washington Cities located within the Case Area are Aberdeen, Algona, Anacortes, Arlington, Auburn, Bainbridge Island, Beaux Arts Village, Bellevue, Bellingham, Black Diamond, Blaine,

Like the State, Case Area political subdivisions were not signatories to the Treaties. But they are responsible for the maintenance and construction of roads and culverts, of which there are thousands within the Case Area. WSAC and AWC have concerns that the lower court's interpretation of the treaty rights may be extended to culverts of other political subdivisions, as well as numerous related activities that potentially impact salmon supply.

INTRODUCTION AND SUMMARY OF ARGUMENT

Today, it is the State of Washington that must dig deep to find $1.88 billion to fund culvert replacement.

Bonney Lake, Bothell, Bremerton, Brier, Buckley, Bucoda, Burien, Burlington, Carbonado, Carnation, Centralia, Chehalis, Clyde Hill, Concrete, Cosmopolis, Coupeville, Covington, Darrington, Des Moines, DuPont, Duvall, Eatonville, Edgewood, Edmonds, Elma, Enumclaw, Everett, Everson, Federal Way, Ferndale, Fife, Fircrest, Forks, Friday Harbor, Gig Harbor, Gold Bar, Granite Falls, Hamilton, Hoquiam, Hunts Point, Index, Issaquah, Kenmore, Kent, Kirkland, La Conner, Lacey, Lake Forest Park, Lake Stevens, Lakewood, Langley, Lyman, Lynden, Lynnwood, Maple Valley, Marysville, McCleary, Medina, Mercer Island, Mill Creek, Milton, Monroe, Montesano, Morton, Mossyrock, Mount Vernon, Mountlake Terrace, Mukilteo, Napavine, Newcastle, Nooksack, Normandy Park, North Bend, Oak Harbor, Oakville, Ocean Shores, Olympia, Orting, Pacific, Pe Ell, Port Angeles, Port Orchard, Port Townsend, Poulsbo, Puyallup, Rainier, Redmond, Renton, Roy, Ruston, Sammamish, SeaTac, Seattle, Sedro-Woolley, Sequim, Shelton, Shoreline, Skykomish, Snohomish, Snoqualmie, South Prairie, Stanwood, Steilacoom, Sultan, Sumas, Sumner, Tacoma, Tenino, Toledo, Tukwila, Tumwater, University Place, Vader, Westport, Wilkeson, Winlock, Woodinville, Woodway, Yarrow Point, and Yelm.

Absent reversal, tomorrow it will likely be the counties, cities, and even private citizens of Washington who will have to fund the removal and replacement of thousands of culverts, regardless of the cost-benefit ratio for salmon run enhancement. That is the natural import of a decision that could be interpreted to confer upon the Tribes a seemingly limitless veto power over any and all activities that impact the salmon supply in the Case Area.

The range of potentially offending conduct is considerable: everything from dams and docks to levees and roads along streams and rivers, to treated wastewater discharge and private developments. Each of these projects is of considerable benefit to *all* Washingtonians, including the Tribes. They provide for flood control, irrigation for agriculture, hydroelectric power, jobs, mobility, and housing. But by prioritizing salmon supply over all other benefits, the Ninth Circuit opinion does not provide clear guidance and could be read to afford the Tribes the unilateral right to regulate each of these activities, and more.

The panel comforted itself that its opinion had "not opened the floodgates to ... [such] future suits" because the Eleventh Amendment would act as a bulwark. Pet. App. 11a. "The only possible plaintiff," the panel claimed, "is the United States." But irrespective of whether that operates as an effective safeguard for the State of Washington, it is of no comfort to the counties and cities within it because they enjoy no Eleventh Amendment immunity. Accordingly, if left untouched, the Ninth Circuit opinion threatens considerable—potentially insurmountable—expense and uncertainty upon the political subdivision amici.

ARGUMENT

What the treaties at issue promised the Tribes is the "[t]he right of taking fish ... *in common with all citizens*[.]" That, this Court has explained, means a right to "a fair share of the available fish"—not a "right to as many fish as their commercial and subsistence needs dictate[]." *Washington v. Wash. State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 662, 670, 685 (1979) (emphasis added). But that's exactly what the Ninth Circuit's decision granted them. Without clear guidance from the Court, the import of that textually and historically unmoored interpretation is considerable, if not devastating, to the counties and cities in the Case Area.

I. Case Area Political Subdivisions Are Gravely Threatened By The Ninth Circuit's Decision

A. Counties and cities are ill-equipped to assume the cost of replacing their outsized share of culverts

The State of Washington is not alone in its responsibility for culverts in the Case Area. While "10% of barrier culverts involve state roads, 40% [involve] county/municipal roads." J.A. 439a. Indeed, according to recent data compiled by the Washington Department of Fish and Wildlife, there may be as many as 2,037 county-owned barrier culverts within the Case Area. CA9 ER 407-555 (Tribal Trial Ex.

#158).[4] Or, as a July 2012 Washington State Department of Fish and Wildlife Study reports, for every Washington State Department of Transportation ("WSDOT") barrier, "[o]n average, there are two other [non-WSDOT] barriers downstream and five upstream." Pet. App. 203a. Given the disproportionate number of non-State culverts, the county and city amici face a proportionally greater financial threat from the Ninth Circuit decision.

Having concluded that the ownership and maintenance of culverts that block passage of anadromous fish (*e.g.*, salmon) violates the Stevens Treaties, the lower courts imposed a 17-year timeline on WSDOT to replace no less than 800 barrier culverts with "stream simulation"[5] design culverts or bridges. Pet. App. 107a. State projections put compliance at over $2 billion by 2030, or approximately $120 million per year. *See* Pet. Br. 55 (citing Washington State Dep't of Transp., *Restoring Fish Passage at WSDOT Stream Crossings* (Sept. 14, 2017)).[6]

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[4] CA9 ER refers to the excerpts of record submitted to the Ninth Circuit Court of Appeals. This same table also shows that most of these have significant (>200m) upstream habitat, but for a large number of these culverts, the upstream habitat has yet to be measured.

[5] Stream simulation design frequently comes in the shape of a concrete structure, at least as wide as bank-full width plus a buffer. CA9 ER 000015 (Decision, ¶3.38); CA9 ER 000689 (picture of stream simulation design).

[6] *Available at* http://tinyurl.com/yc8n6r47.

Extrapolating state costs to just the counties reveals staggering sums. The average cost of correcting recent culverts was $2.3 million per project. CA9 ER 1068 (Wagner, 20:3-24); Washington State Dep't of Transp., *WSDOT Fish Passage Performance Report*, Table 2 (June 30, 2017).[7] These corrections become even more expensive as WSDOT progresses deeper into its list of barrier culverts and confronts more complex and costly projects. CA9 ER 1068 (Wagner, 20:3-24). Consequently, in 2017, the cost per project increased, on average, to $3.4 million. Pet. Br. 21.

Using just the $2.3 million average puts the cost at nearly $4.68 billion to correct 2,037 known county-owned barrier culverts. Shouldering this financial burden would be crippling. If Case Area counties were ordered to correct all their barriers on the same schedule as the State—i.e., within 17 years—they would have to find an additional $275 million ($4.68 billion/17) per year to meet such a deadline.[8] Compare that figure to the 2013 Public Works Construction Fund for Pierce County, one of the largest counties by population in the Case Area—approximately $28 million.[9] Or the total budget for all of Mason County, a more rural county within the Case Area—

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[7] *Available at* http://tinyurl.com/yby6aexd.

[8] For the purposes of understanding the potential impacts of this decision on counties, WSAC respectfully requests that the court take judicial notice of the budget documents cited below.

[9] *See* Pierce County, *Pierce County 2014 Budget: Public Works and Utilities* 406, http://tinyurl.com/yadthvkv (last visited Mar. 5, 2018).

approximately $85 million.[10] It's no exaggeration to say that if such a staggering judgment were issued, depending on county budget and culvert numbers, some would face the prospect of bankruptcy.

That threat is all the more real given the limited ability Washington counties have to raise new funds for culvert correction. Funding for existing county road improvement projects can include a mix of property tax revenue, the county allocation of revenue from the state Motor Vehicle Fuel Tax or "gas tax," traffic impact fees paid by developers, and state and federal grants.[11] But the revenue a county receives from the gas tax and state and federal grants is largely outside the control of the county. Both the Washington Constitution and various statutes limit the rate of growth with respect to authorized taxes.[12] And in the absence of express authorization from the State Legislature, counties cannot impose a new tax to pay for culvert corrections.[13]

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[10] *See* Mason County, *Mason County Resolution No. 92-12, Adoption of 2013 Budget* (Dec. 30, 2012), http://tinyurl.com/y7s7vh6n.

[11] *See e.g.*, Pierce County Dep't of Public Works and Utilities, *Six-Year Transportation Improvement Program (2013-2018)* N-2 to N-6, http://tinyurl.com/ybtfmktp (last visited Mar. 5, 2018).

[12] *See, e.g.*, Wash. Const., art. 7, § 2 (limitation on property tax levies); Wash. Rev. Code § 84.52.043 (limitation on property tax levies); Chapter 82.14 Wash. Rev. Code (local retail sales and use taxes); *see also* Municipal Research and Services Center, *A Revenue Guide for Washington Counties* (Aug. 2017), http://tinyurl.com/ycw9vrnh.

[13] *Hillis Homes, Inc. v. Snohomish Cty.*, 650 P.2d 193, 195 (Wash. 1982).

At a minimum, absent new funding sources, counties would likely be forced to divert money from their general funds—monies that go to courts, jails, sheriff departments, health, parks, animal control, and growth management and land use planning—to pay for culvert correction.[14] And, as it is, many counties are already struggling to fund even these most basic services.[15] Layering the mandated replacement of culverts on top of these core responsibilities would be devastating.

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[14] *See, e.g.*, Wash. Rev. Code § 2.32.210 (court reporter compensation); Wash. Rev. Code § 3.34.020 (district court judges); Wash. Rev. Code § 3.54.010 (district court clerks); Wash. Rev. Code § 3.58.050 (district court facilities); Wash. Rev. Code § 13.04.040 (juvenile probation counselors and administrators); Wash. Rev. Code § 15.09.131 (horticultural and pest eradication); Wash. Rev. Code § 26.12.220 (family court services); Wash. Rev. Code § 36.32.120 (building code compliance, business licensing, county jails and courthouses, fund all county offices, including the sheriff and the prosecuting attorney); Wash. Rev. Code § 36.70A.130 (growth management); Wash. Rev. Code § 68.50.010 and Wash. Rev. Code § 68.50.160 (disposal of unclaimed human remains); Wash. Rev. Code § 68.52.010 (morgue); Wash. Rev. Code § 70.12.025 (public health). *See also* Whatcom County, ***2013-2014 Final Budget, Volume I*** 48-51 (2013), http://tinyurl.com/yc4799jr.

[15] *See, e.g.*, Lewis County Board of County Commissioners, ***2012 Annual Budget*** 43, 105, 111, http://tinyurl.com/ycc5lx23 (last visited Mar. 5, 2018) (revenues falling short of expenditures, significant personnel losses in the prosecuting attorney's office and sheriff's departments).

B. Given the breadth of the Ninth Circuit opinion, counties and cities are equally threatened by non-culvert projects that impact salmon supply

What's more, this only accounts for the cost of culverts removal and replacement. The Ninth Circuit opinion imposes no limiting principle. If, as the panel held, the treaties include an implied promise "that there would be fish sufficient to sustain" the Tribes by providing a "moderate living," Pet. App. 92, 94, nothing precludes the Tribes from pursuing any and all other potentially offending conduct.

As indicated in a 1999 report drafted with input from the Tribes, a host of other human-caused activities similarly exert downward pressure on salmon populations. Carol J. Smith, *Salmon Habitat Limiting Factors in Washington State.*[16] Dikes, levees, revetments, and roads disconnect floodplain main channels and impede lateral movement of flood flows, both of which are important components of salmon habitat. *Id.* at 118. Removal of riparian vegetation decreases shade and increases bank instability, which causes erosion. *Id.* at 127. Logging, development and agriculture may cause detrimental changes to the quantity and quality of sedimentation in which salmon deposit their eggs. *Id.* at 174. Large woody debris is an important component of stream habitat, *id.* at 127, and while logging is the primary

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[16] *Available at* http://tinyurl.com/y9glzj22. Tribal contributions to the report were made by Jennifer Cutler and Ron McFarlane of the Northwest Indian Fisheries Commission (NWIFC) (*see id.* at 2); *see also* CA9 ER 1127 (McHenry, 157:11-18).

human activity that decreases its presence, any development that requires clearing near streams may have similar impacts. Any human activity that decreases the amount of forest cover, wetlands, and riparian vegetation or increases the amount of impervious surfaces, sedimentation, and roads (i.e., all development) may change the frequency and magnitude of flood flows, which play a key role in stream channel structure and function. *Id.* at 174. Agricultural land uses which require dikes and tide gates and any land use that requires near-shore filling and dredging or construction of overwater structures (*e.g.*, docks and piers) may harm estuarine and near-shore habitat. *Id.* at 192. And "industrial, urban, and agricultural activities" may result in alterations of the amount of dissolved oxygen and water temperatures, which can be "detrimental to salmonids or to the food web that supports salmonids." *Id.*

While the parties before this Court speak in terms of millions and low billions of dollars, it stands to reason that left unaltered, the cumulative effect of the Ninth Circuit's opinion could leave stakeholders talking in terms of tens, if not hundreds, of billions of dollars.

C. The lower courts' overbroad injunction contravenes settled law and threatens counties and cities with wastefully diverting expenses

The jarring figures we reference are, at least in part, a consequence of the overly broad injunction issued by the district court and approved by the Ninth

Circuit. It is axiomatic that courts are precluded from issuing injunctions that go beyond that which is necessary to correct the specific violation. *See Milliken v. Bradley*, 433 U.S. 267, 282 (1977) ("federal-court decrees exceed appropriate limits if they are aimed at eliminating a condition that does not violate [federal law] or does not flow from such a violation"); *Hoptowit v. Ray*, 682 F.2d 1237, 1247 (9th Cir. 1982) ("only the specific conditions that violate the Constitution may be remedied, and the remedy may be only so much as is required to correct the specific violation"), *overruled on other grounds by Sandin v. Conner*, 515 U.S. 472 (1995); *see also United States v. Washington*, 520 F.2d 676, 689 (9th Cir. 1975) ("We agree with the state that the court's equitable discretion does not extend so far as to permit it to compensate the tribes for the unanticipated heavy fishing by foreign ships off the coast").

Here, the lower courts here did precisely that by holding the State accountable for not only all human activities that have contributed to diminished fish harvests over time (regardless of the degree to which the State's actions have contributed), but for activity that has had *no impact* on the salmon population *at all*. As Judge O'Scannlain explained it, the import of the panel opinion is the State must repair all culverts in the Case area "without regard to whether replacement of a particular culvert actually will increase the available salmon habitat." Pet. App. 37a. That is because nearly 90% of implicated state barrier culverts in the Case Area are upstream or downstream of other non-State barriers. J.A. 327a-328a. Given the (over-)breadth of the injunctive relief,

there is every reason to believe the same ill-fated logic would prevail if the counties and cities become the next target. The potential result being wasteful re-allocation of resources and concomitant deprivation of the communal benefits that come along with the activities from which funds will be diverted (*e.g.*, docks, dams, irrigation).

D. Without clear guidance on its scope, the Ninth Circuit's opinion could chill public works projects and hamper developments beneficial to citizens of the Case Area Counties and Cities

To this point, we've discussed only the impact of the Ninth Circuit's decision on pre-existing projects. Make no mistake, the prospective impact is just as, if not more, significant. Even in the absence of a lawsuit, the mere threat of litigation will have an immediate impact on political subdivisions. Without clear guidance, counties and cities considering any project—public or private—will not know how to give due attention to tribal treaties in their decision making. The result: even the most remote threat to salmon will likely chill future developments. For a county or city to proceed otherwise could prove an unpalatably costly endeavor as a later determination that the project adversely impacts Tribes' "moderate living" could ring up considerable financial costs.

This is just one example of the mischief that will ensue from the Ninth Circuit's opinion. Consider another. When asked to permit a private development, Case Area counties may be inclined to approve it subject to mitigation conditions on wetland

development under the Washington Growth Management Act and the county's critical area ordinances. Such restrictions are cabined by this Court's decisions in *Koontz v. St. Johns River Water Management District*, 570 U.S. 595 (2013), *Dolan v. City of Tigard*, 512 U.S. 374 (1994), and *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987). But assuming the county can demonstrate "a 'nexus' and 'rough proportionality' between the government's demand and the effects of the proposed land use," the county is within its right to set such conditions. *Koontz*, 570 U.S. 599.

In the wake of the Ninth Circuit's decision though, the county may also have to condition permit approval on Tribal confirmation that the proposed mitigation adequately protects their treaty right to take fish. However, it is unclear whether the Tribe's approval will be similarly subject to the "nexus" and "rough proportionality" test. Were the county to then add the tribal conditions to the permit, it might violate the unconstitutional conditions doctrine under *Koontz* and *Nollan/Dolan*. Alternatively, if the county were to grant the permit without such conditions, it might violate the treaty right to take fish. In other words, the potential import of the Ninth Circuit's decision threatens political subdivisions with the prospect of being liable to someone no matter which path they pursue. The signatories to the Treaty certainly could not have intended such an outcome, nor is it good policy to place the counties and cities in such an untenable position.

II. Washington's Counties And Cities Face An Even Greater Threat Than The State

The State's counties and cities have justifiably greater concerns than the State of Washington itself. In concurring in the denial of en banc rehearing, two panel members claimed they were "sure" their opinion had "not opened the floodgates to a host of future suits" in part because the Eleventh Amendment would bar "further suit against Washington State ... brought by the Tribes." Pet. App. 11a. As they explained, future suits could only proceed if the Tribes first receive approval from the federal government. *Id.*

As an initial matter, the panel's level of confidence is odd considering it could not even anticipate "what the hypothesized future suits would be." *Id.* Second, the answer is readily apparent: suits against counties and cities. That is because, unlike the State, "cities and counties do not enjoy Eleventh Amendment immunity." *Hess v. Port Auth. Trans-Hudson Corp.*, 513 U.S. 30, 47 (1994); *see also N. Ins. Co. of New York v. Chatham Cty.*, 547 U.S. 189, 193 (2006) ("[T]his Court has repeatedly refused to extend sovereign immunity to counties").

The panel's assurance that it "was no easy thing for the Tribes to persuade the United States to institute proceedings against the state of Washington," Pet. App. 11a, merely reinforces the deep concerns of the counties and cities, since the Tribes are able to bring suits against them without the participation of the United States. If it's difficult to persuade the United States to participate in a suit against the state

of Washington, the obvious move for the Tribes is a series of lawsuits against the state's political subdivisions. Similarly, the counties and cities are in no way reassured by the panel's reassurance that "further suit against Washington State seeking enforcement of the Treaties" cannot be brought by "non-Indians who would benefit from an increase in harvestable salmon" or by "environmental groups." *Id.* While it is true that non-Indians and environmental groups cannot sue to enforce tribal treaty rights, they are likely to import the fish supply guarantee created by the Ninth Circuit opinion into their own lawsuits brought on other grounds, *e.g.*, in litigation challenging development approvals and water allocation decisions based on other theories—including those challenging existing, privately held water rights—by arguing that those decisions must take into consideration that newly understood treaty-based right.

And even where Eleventh Amendment immunity applies, the *Ex Parte Young* doctrine allows a suit—technically brought against an individual—so long as the complaint "alleges an ongoing violation of federal law and seeks relief properly characterized as prospective." *Va. Office for Prot. & Advocacy v. Stewart*, 563 U.S. 247, 255 (2011) (quoting *Verizon Md. Inc. v. Pub. Serv. Comm'n of Md.*, 535 U.S. 635, 645 (1997). *Ex Parte Young* still applies even if there are severe "fiscal consequences" to complying with an injunction, as in this case. *Edelman v. Jordan*, 415 U.S. 651, 667-68 (1974).

Accordingly, the majority's assurances that the Eleventh Amendment cabins its opinion is cold com-

fort to cities and counties who cannot avail themselves of that shield. *See, e.g., Confederated Tribes of Chehalis Reservation v. Thurston Cty. Bd. of Equalization*, No. 08-cv-5562, 2008 WL 4681630 (W.D. Wash. Oct. 21, 2008) (suit by tribe against Washington county concerning tax assessment); *Makah Indian Tribe v. Clallam Cty.*, 440 P.2d 442, 443 (Wash. 1968) (same concerning imposition of ad valorem tax on tribe members' personal property). They are thus subject to the prospect of spending billions of dollars collectively when demanded by the Tribes (if a similar injunction issues), not to mention the threat of an unilateral tribal de facto veto power on any future project that might possibly affect the supply of salmon.

Whatever solace the panel took in knowing the federal government would operate as a check against the Tribes, it is of no refuge—and certainly provides no backstop—for Washington State's counties and cities. Simply saying, as the panel did, that the opinion is narrow does not make it so. The decision's consequences threaten to reach far beyond the facts of this particular case and deep into the pockets of hundreds of political subdivisions.

CONCLUSION

For these reasons, WSAC and AWC respectfully request that this Court reverse the judgment of the Ninth Circuit opinion.

Respectfully submitted,

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